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THE
ROWER'S MANUAL

BY

J. D. R. PUTMAN

1859

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Joseph E. Raycroft.

THE

Rower's Manual,

AND

BOAT CLUB REGISTER.

CONTAINING A SHORT HISTORY OF EARLY BOAT RACING—INSTRUCTIONS TO ROWERS AND COXSWAINS—TRAINING BOATS' CREWS—DIET—MANŒUVRES—LIST OF BOAT CLUBS—RECORD OF TIME MADE BY WINNING BOATS—DICTIONARY OF TERMS—REGATTAS AND REGATTA RULES—TOGETHER WITH A VAST AMOUNT OF USEFUL INFORMATION.

BY J. D. R. PUTMAN.

Written and Compiled under the supervision of
STEPHEN ROBERTS, ESQ.,
President of the Empire City Regatta Club.

NEW YORK,
1858.

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PREFACE.

The want of a manual like the present has long been felt amongst the oarsmen and amateur boatmen of this country. No attempt has hitherto been made to supply its absence, and the difficulty of procuring English works, which treat upon the subject of rowing, is so great that all theoretical acquaintance with its principles is out of the question. To become an oarsmen one must serve the rough apprenticeship which the acquisition of knowledge, undirected by intelligence, always necessitates. Under such circumstances, it is not surprising that many who recognize the healthful and invigorating influence of this noble exercise should be deterred from endeavoring to become proficients in it.

Another reason why our young men have exhibited so little inclination to avail themselves of the advantages of the manly pursuit, has been the absence of the stimulus of rivalry. Abroad the rowing club is an institution almost as universal as any other of the associations for the purpose of enjoyment. That it is not equally so here is to be attributed to the fact that a general ignorance prevails, not only as to the benefits, but as to the principles of these clubs, and that they require to be clearly placed before the people before they can be induced to encourage them by their personal example.

It is to accomplish both these objects—to teach theoretically the use of the oar, and to lay down rules for the organization of boat clubs—that the present little manual has been compiled. Should it have the effect of diffusing a taste for this fine exercise, and thereby help to develope the bone and muscle of the rising generation, it will have fully answered the expectations of its author.

NEW YORK, July 1, 1858.

BOAT RACING AND BOAT CLUBS IN EARLY TIMES.

It is not our intention to go much into detail on the subject of boat racing in early times, the object of this work being to deal with matters of more utility and having a closer connection with affairs appertaining to the formation of boat clubs, and the getting up of regattas and boat races at the present time.

The records of the past, on the subject of which we propose to treat, are very much befogged, and the most diligent search would only be able to bring to light a few incidents of interest to the admirers of aquatic amusements and the lovers of the healthful and invigorating exercise which this work is intended to promote. Old men have mostly gone with old times, and oblivion has closed over the many scenes to which they were witnesses, so that we find very little left to point back to the days when boat racing was first introduced into this country.

The most notable race looking up from the past of which we can gain any correct intelligence, was that which took place in New York bay, on the 9th of December, in the year 1824, between the four oared boat "American Star," rowed by Whitehall boatmen, and the "Dart," a boat belonging to the British frigate Hussar, which was then lying in the harbor. We copy the following account of the affair from a letter recently published in the Dispatch of this city, and from the New York Evening Post of December 10th, the day after the race took place:—

In the beginning of December, 1824, the British frigate Hussar, Capt. Harris, anchored in New York harbor, and in consequence of kindnesses which he had extended to American vessels at sea, was warmly received. On the 5th of December he challenged the watermen of New York to a rowing match for one thousand dollars. The challenge was accepted by the Whitehall boatmen, and the race came off between thirty minutes past 12 M.

and 1 o'clock, P. M., on Thursday, December 9, 1824.

The British boat, which had previously won eight races in the West Indies, and had not a competitor on the river Thames, was named the Dart; and the boat entered by the Whitehall men was called the American Star, built by Mr. Chambers. She had been beaten in a race in 1818 by the boat New York, made by a celebrated builder of that day named Baptist.

The judges on the part of the American boat were Major Howard, Capt. Henry Robinson and Mr. Richard Sadlier—on the part of the British boat, Mr. Henry Barclay, and two lieutenants of the Hussar.

On starting, the Star took the lead, the Dart shortly came up and lapped her, on which the Whitehall boys applied a little more power to their oars, forced their boat ahead, and maintained the advantage the whole distance, coming in to the stake boat between three and four hundred yards in advance of her competitor.

Both the stake boats had the American and British flags flying, and when the Star came in the crew of the British launch gave her three hearty cheers and struck their flags. The distance, four miles, was performed in twenty-two minutes, in a heavy swell. [The distance or the time will of course be doubted.] The boats started from the vicinity of the frigate, which lay off the Battery, and rowed around a boat stationed off the old North Battery. It is reported in the papers of that day that upwards of fifty thousand persons assembled to witness the race.

A dinner was subsequently given by prominent citizens to Capt. Harris and his officers, and during their stay they were *feted* in every possible manner. The public dinner was given at the old Chatham theatre.

The Whitehall boatmen made every effort to purchase the boat American Star, that they might present her to Capt. Harris, but her owers refused to part with her on any terms. Failing in their object, they, through James H. Aymor, Esq., informed Captain Harris of their regrets, to which he responded in suitable terms. The Hussar put to sea on the 15th of December, 1824.

The "American Star" was rowed by Messrs. A.

Commeyers, Cornelius Commeyers, Richard Robbins, and Charles Beaty—coxswain, John Magness. The "Dart" was rowed by English sailors, who were, as the above account states, famous for their superb oarsmanship.

The Whitehall boatmen also won a race which created considerable excitement, on the 20th of May, 1825, which, together with their previous achievement, gave them such a distinguished position in the community that they were assigned an honorable position in the great canal celebration which took place shortly afterwards.

From the time of the above races down to the year 1834, we are unable to find anything in the way of boat racing of sufficient importance to dwell upon. During the latter year the famous "Jersey Blue Race," so called, took place. This was a match between a boat rigged for two oars and one to be rowed with two pairs of sculls. The former was rowed by two Whitehall boatmen, named Christopher Gregor and William Gibson, and the latter boat, to which the Jerseymen gave the not very euphonious name of "Hookemsnivy," was pulled by the brothers Seaman. The course lay from Jersey City, opposite New York, down the bay to Robbin's reef, off the north point of Staten Island, and return. The Seamans were the victors. The sculls beat the oars. It may be proper here to remark that the "Hookem-snivy" was the first boat, of which we have any knowledge in this country, which was built with a flat keel. She was constructed by the two brothers who rowed her, and as an evidence of her qualities the fact may be recorded that she was afterwards rowed in a number of races, and even twelve years after she achieved her first victory she became the champion in a race over the same course.

A lull followed the above contest, and although during the decade between 1840 and 1850 there were a great number of scullers' matches, between Stephen Roberts, Charles Thomas, Francis D. Bigelow, Robert Martin, Sidney Dorlan, James Lee, Wm. H. Decker, and a number of others, there were none the main features of which would distinguish them from those of almost every day occurrence, except perhaps that between Stephen Roberts and Robert Martin. This match took place in 1848, in seventeen feet working boats, cut down so that they bore more the resemblance of shells or skeleton boats than they did of their original shape. The distance rowed was ten miles, extending from Jersey City around Robbin's Reef light house and back to the place of starting. It was probably the longest sculler's race ever rowed, and was performed by Mr. Roberts, in the winning boat, in one hour and twenty-two minutes.

Boat Clubs and Regattas.

The first regularly organized boat club in the United States, of which we have any knowledge, was formed in New York about the year 1823. It was called the Knickerbocker Club, and it afterwards became famous as being the winner in their four oared boat called the "Whitehall," of a sharply contested race which took place on the 20th of May, 1825, as before mentioned. The "Whitehall" was represented as being of exquisite workmanship, and was constructed by the Messrs. Montaignies, of New York.

The real fervor for the formation of boat clubs first manifested itself in New York about the year 1834, and aquatic amusements soon thereafter began to elicit considerable attention, and for a number of years subsequent the ardor for regattas and boat racing rose almost to a fever. A large number of boat clubs suddenly sprung up, among the most notable of which were the Wave Club, the Gazelle Club, the Gull Club, the Ærial Club and the Pearl Club, which together formed what was called the Castle Garden Boat Club Association. They all had their houses and kept their boats in and around Castle Garden. Of the above the Wave Club was the most noted among the amateurs, and we believe for a long time the flag of championship waved over her quarters.

These clubs were composed of ten to twelve men each, all amateurs, following light avocations, and all taking the most lively interest in the amusements which were afforded by their mutual endeavors. Annual regattas, and often two or three during a season, were given, in which all the clubs invariably joined, not only as promoters but as participants in the contests for the prizes ; always actuated by the spirit of generous rivalry, and each contributing an equal share to make the regattas pass off satisfactorily. Trickery and trading were unknown words then in the boat racing vocabulary. The race course was from Castle Garden, the starting point, around Bedlow's Island in the bay, and return, being in distance about four miles.

The famous Poughkeepsie and Newburg regattas took place between the years 1835 to 1837. They were attended by immense concourses of people, some of whom came a great distance, and almost every section of the States of New York and New Jersey were represented on those occasions. At these regattas were also found our New York Club boats, some one of whom generally succeeded in carrying off the honors of victory. The brothers Roberts also became somewhat noted about this time as oarsmen whom few could be found to excel. They were not, strictly speaking, amateurs, although, like all the members of the other clubs, their legitimate calling was found among the ramifications of trade on land. They did not follow the water as a business, but most of their leisure hours were spent in rowing. They took the lead, soon after their advent as oarsmen, and for a number of years they held the undisputed title of championship.

At one of the regattas given in Newburg, three suits of flags were offered as prizes, which were contended for as usual by the New York clubs. In this race the "Wave" took the first suit of colors, the "Gull" the second, and the "Corsair," of Newburg, the third; although the whole fleet were beaten by a Poughkeepsie boat, which, through some informality, was not regularly entered, and could not, therefore, claim any of the prizes. After the close of the race, the crew of the "Gull" rowed their boat back to New York, a distance of sixty-five miles, and arrived home before eleven o'clock the same night. The same crew afterwards rowed their boat from New York to Philadelphia, through the Delaware and Pennsylvania canal.

For a number of years previous to 1850, the annual exhibitions of the American Institute were given at Castle Garden, and two or three boat races invariably formed a part of their programme. For the first few years these races were marked with popular favor, but eventually they became alloyed with the spirit of rowdyism, which caused them to sink into disgrace, and they were abandoned. Previous to this the clubs began to go down; the men who composed them, as they advanced in years, lost the interest they had felt in them, and no new admirers offered to fill their places. The oar lost the athletic arm to wield it, the thwart became a vacant seat, the boat houses went to decay, and the noble little craft found their way into the dusty lofts of boat builders' establishments, until about 1852 there was hardly sufficient members left of all the various clubs to man a six oared barge.

In 1854 there was a revival which has been steadily on the increase up to the present time, so that now we can number our boat clubs throughout the country almost by hundreds.

RACE BOATS.

The boats used in racing by means of the scull and oar are chiefly at this present time the following, viz :—First, skeleton scull boat; Second, the sculling outrigger; Third, the two oared outrigger; Fourth, the four oared outrigger; Fifth, the six or eight oared outrigger; and Sixth, the gig or race barge, with four, six or eight oars.

The outriggers have now almost entirely superseded the old style of boats in which the rowlocks were fixed upon the wale-streak; but occasionally even now the rules of regattas compel their use. These, however, are exceptions, and for racing purposes the four first varieties above enumerated comprise all that are necessary.

The "British Rural Sports" says the outrigger boat is the simplest form, and a great improvement upon the old principle, which is no doubt true, for it gives science in oarsmanship a more equal chance when brought in opposition to physical power and endurance. But the Rural Sports further says that the decline in boat racing, as a national sport, is in a great measure due to the introduction of the fragile and swift kind of canoe built boats. This opinion may hold good in England but it will not be admitted in the United States.

The writer further remarks that it now takes a long time to learn to sit a racing boat, and many upsets are occasioned before the perfect command of them is attained which racing demands. In former days the boat was obliged to be wide enough to carry the rowlocks on the wale-streak, or gunwale, but her water line was not near so wide as the rowlocks themselves, and consequently on the slightest roll, or in rough water, she was much impeded in her course and rendered still lower than she otherwise was, besides the impediment offered by the wind to lofty sides.

AN EIGHT OARED RACE BOAT.

The eight oared race boat with outriggers is of course of longer form than that of a six or four oared boat. They may vary in length from fifty to sixty feet by two feet three or four inches in breadth, according to her crew. When too long they would be found weak, and care should therefore be taken in this respect. The rowlocks are disposed four on each side, between the thwarts, but approaching nearer to the forward one than to that behind them. Here also they must be suited to the stroke of the crew; but the usual and average length from the sternmost edge of the thwart to the inside of the thole is seventeen inches. Good boats of this class, says the British Rural Sports, from which we continue to extract, have been built with three streaks, with the middle rowlocks raised from the wale-streak, and the two bow as well as the two stern rowlocks only supplied as outriggers, and this kind of build is said to be best adapted to a heavy crew. It is given as an opinion that a modification of this plan, by using only very short middle outriggers, is the best suited to boats of this length and description. The oars in this kind of boats vary in length. Numbers eight and seven, counting from the bow, being a little longer than number two and number one, or the bow oar, while the four middle oars are of equal length, and about two or three inches longer than that of the stroke, according to the weight and power of the men. In all cases the steadiness of the boat is in proportion to the width and flatness of the floor, which, if it is a segment of circle, causes the boat to be very crank, and inclined to roll on the slightest inequality of the rowing.

A MAHOGANY BOAT.

These boats are generally constructed without any keel, of a single sheet of mahogany in the middle, scarfed, or united by a splice with copper nails, at places not opposite each other, and bent into the proper form by means of steaming. The bows and stern are very fine and sharp, and the former has usually a thin edge of copper added to make it still more cutting. The bows are often cut out of the solid wood, in order to get the exact form wanted, but more often they are steamed and bent. The mahogany is about the thickness of a quarter dollar, when sandpapered down and varnished, and is called the skin of the boat. It is strengthened by ribs of oak inserted at stated distances. In the bows and stern they are merely thin pieces of oak. On the top of the whole boat, with the exception of the space alloted for the oarsmen, is fixed a deck or cover of thin mahogany or varnished canvass, supported by a light frame work, thus making a hollow compartment at each end, which is rendered water tight by a bulk-head towards the middle. The oarsmen sit in the vacant middle space, either even with the deck or a little below its level. Around the space occupied by the oarsmen is the walc-streak, and a board of corresponding height is carried across the boat in a pointed form in front. This is called a wash-board, and serves to keep any water shipped in a swell from running into the central space where the oarsmen sit. A similar wash-board is also carried straight across at the stern end of the space. Within the space there are string timbers on each side, which serve to support the irons of the outriggers.

THE STRETCHER.

A moveable foot-board, called a stretcher, is fixed for the feet of the oarsmen, and capable of being shifted by a simple but ingenious contrivance called a rack. Attached to this stretcher is a leather strap for the foot, which enables the oarsman to bring his body up quickly, without bearing on his oar too much.

THE OUTRIGGERS.

The outrigger rowlock consists of four iron rods, which are bolted to the sides of the boat, the two middle ones to the string timbers, mentioned in the description of the boat, and the two others to the gunwale, being well supported by the kelson, fore and aft. These four irons gradually approach each other, being from thirteen to sixteen inches in length and about one-third of an inch in diameter, of a section sometimes square and sometimes round. They are rivetted or forged to a double plate about seven inches long and three-quarters of an inch wide, with a varying depth, which stands perpendicularly and lies parallel with the side of the boat.

About three and a half inches of this plate is plugged with wood, upon which is nailed a thick piece of leather, and this is called the rowlock, being the part upon which the oar lies. Before this piece of leather is a space almost two inches long and three or four inches deep, into which is jammed a wedge of oak, standing up considerably above it, and called the thole, against which the whole power of the oarsman is exerted in making his strokes. Behind the leather again, another and similar wooden wedge is jammed into a corresponding space, and this is called the stopper, and is for the purpose of preventing the oar from flying off the rowlock when it is pushed forward on the leather. In this way there is left a square space about the breadth of the hand, bounded before by the thole, behind by the stopper, and below by the leather nailed upon the rowlock, and this space must be accurately adjusted to the reach and length of the oarsman, being just wide enough to enable him to get sufficiently backwards and forwards, and also placed high enough to allow him to clear his knees. It must also be fixed at such a distance astern of the thwart that the oarsman shall be enabled to get his oar as much back as he pulls it before it—that is, it must be in the middle of his reach, which varies much with different styles of rowing, according to whether the individval swings back more or less than he reaches forward over his toes.

THE OARS.

The oars are made of white ash or spruce, and consist of the handle, the loom and the blade. The handle and loom occupy the length from the rowlock to the middle of the boat, or as far inboard as will suit the oarsman. The handle is made round for the width of the hand, but not too smooth, and is left as it comes from the rasp. Outboard the oar is round or nearly so, then of an oval section, and finally ending in the blade by gradually spreading out until it terminates in a breadth of thin wood of four, five or six inches in width. The oar ought to be nearly balanced at the thole, but is always a little heavier outboard than inboard.

THE RUDDER.

A rudder is generally added to these boats, and there is consequently a thwart required for a light coxswain, though in racing he sometimes sits on the floor of the boat, and his weight acting as ballast gives her greater steadiness. There are seldom more than eighteen inches allowed between the coxswain's thwart and the stretcher of the stroke oarsman, and here he must sit, with his legs bent up, so as to accommodate himself to the limited space, or as well as he can, with a hand on each gunwale. The rudder is worked by two long cords, which run through eyes or pullies on the deck or canvass covering of the stern. These are called the yoke lines, and they are attached to a cross bar of metal or wood, termed the yoke, which stands out on each side of the stern, at right angles to the rudder, and thus when pulled turns it in the manner desired.

THE SPOON OARS.

The oars are sometimes made with a slight curve flatwise in the blade, and these are called "spoon oars." The middle ones are often made a trifle longer than the stroke and bow oars, but generally they are almost exactly of a length, and where the crew are nearly matched in strength this ought to be the case.

ROWING.

Rowing may be defined as the propulsion of a boat through the water by means of oars, the water being the fulcrum, the rowlock the weight to be moved, and the hand giving the power—the whole being a lever of the second kind in mechanics.

The oars are numbered from the bow of the boat towards the stern—number one being the bow oar, which, together with all the odd numbers, are on the right or starboard side of the boat, and all even numbers, including the last, which is the stroke, are on the left or larboard, which is called the port side. In most of the outrigger boats the rower sits nearly in the middle of the boat—that is to say about on that part which is one-third of the length of the thwart from the side opposite to his rowlock, or two-thirds of the way over from the gunwale on the side from which his oar is worked. The rower sits square to his work, with his knees separated, and his heels closely together and firmly against the stretcher. He will then swing backward and forward exactly in the line of the boat, or parallel with it. If his feet are nearer the side of the boat than they ought to be, he will swing towards the middle, or as it is called "row into the boat;" and if they are too near the middle line he will "row out of it;" both being bad faults, and making the boat rock considerably.

The stretcher should be adjusted to such a length that the oar will just clear the knees, and the inside foot, being the one upon which most strain falls in feathering the oar, should be planted most firmly against the stretcher. The seat or thwart should be moderately high, so that the rower can have a good command over his oar, but low enough to allow him to get well over his knees. The lower the seat the more likely the rower is to drag the boat under the water; and the higher he sits, if he can only clear his knees, the lighter and smarter is the stroke, and the less the boat dips when on the hand. The great object is to pull the boat straight through the water, taking sufficient hold of it, but not depressing the boat in doing so; and on no account raising the body from the swing by bearing downwards upon the loom and handle.

INSTRUCTIONS TO BEGINNERS.

Young oarsmen should always remember that it is often more difficult to unlearn bad habits than it is to learn good ones. While under tuition the instructor must see that the young rower has his hands properly placed, the outside one grasping the handle, while the inside one lays hold of the loom. This allows of the elbows being kept close to the side, and of their being well straightened immediately after the conclusion of the stroke, and before the body has had time to recover itself fully. The stroke finishes with the feather, which the learner must catch by watching and imitating ; and this is immediately succeeded by the restoration of the oar to its former state. in doing which the wrist is straightened and the hand and elbow thrust rapidly forward at the same time, with a forward action of the shoulders, so as to carry the loom away from the body at once, and then when the arm is straight the body follows as rapidly as it is required to do. The head is kept well up, and the eyes looking at the back of the man next in front. The chest full and prominent; the back slightly arched forward, easily and gently; the shoulders playing freely forward, and the hands reaching well over the toes. If all these evolutions can be carried out in the first lesson, the pupil is a very apt one; but the teacher need not be disappointed if he fails in inculcating more than the mere power of swinging, and of avoiding "crabs," which are the result of the water catching the oar when there is considerable way on the boat, and turning its blade flat, so that the rower cannot bring it out, and by the impetus of the boat is in danger of being driven backward over his thwart.

These are the fundamental principles of rowing, but the delicacies of the art consist in rowing straight through the water exactly at the proper depth, laying out the strength in the right way, and at the right time, and feathering neatly and at the proper distance from the water.

The depth at which the oar should be brought into the water should be such as just to cover the blade, and the stroke oar should always keep to his depth, in which respect he should be imitated by his pupil, so far as his strength will allow; but if he is too weak to do so, he had far better not dip his oar as deep as the stroke, so that he pulls it through as much water, rather than to dip deep at first, and then be compelled to finish his stroke in the air in order to keep time.

TRAINING A BOAT'S CREW.

We have nothing but English authority for the proper training of a boat's crew, and while we make free to adopt it in the main, we must be permitted to say that it can be safely deviated from in many particulars, to suit certain waters and certain conditions of crews.

SELECTING THE MEN.

In directing the choice of a boat's crew, it will be understood on the start that the men to be selected from are all in good health. At first sight it may appear that in rowing, all below the waist is idle, but this is by no means true, for the legs and thighs take their full share in the muscular exertion going on. Many mistakes have been made in picking men from this error in judgment; for it has been found, when perhaps too late, that good knees and thighs are required, as well as good arms and shoulders. This is easily explained by a reference to the work which is to be done, and by examining the frame work which is to do it.

Now, then, what is that work?

It consists of pulling an oar or scull through the water by the muscles of the arms and back.

But what enables the power, called into play by the arms and back, to act upon the boat?

Why, the resisting and pushing power of the legs and thighs, without which the body would glide off the thwart, and fall helplessly into the boat. Hence it is manifest, that just as much as the arms generate the power by pulling against the water, by so much exactly will the legs convey that power to the boat by pushing against the stretcher.

ESSENTIAL POINTS.

In selecting men for this beautiful and healthy exercise, it should therefore be borne in mind that the following points are essential, though of course this, like similar rules, admits of exceptions:—

First, look to the moving powers—the arms, shoulders and back. They should be muscular, with good long wrists, straight elbows, powerful and pliable shoulders, and above all, a good strong muscular loin. Without this last point the strength of arms is of no use; the body, instead of drawing the oar to it by the muscles of the arm, is itself drawn forward over the oar; and the stroke is rendered ineffective. Nothing is more difficult than to foretel, by examination, the exact degree of strength which any individual form is capable of displaying; but with regard to the back and loin, it is almost impossible to form any useful opinion without actual trial; for so much depends upon early habits of various kinds, that no conclusion from the formation can possibly be arrived at. It is seldom that any one can say, with anything like certainty, that a particular individual will make a good oarsman; but the contrary may often be affirmed, and it may generally be prognosticated that an awkward, slow, and very high shouldered man will prove useful in a boat.

Next to this point, see that the legs and thighs, without being too heavy, are sufficiently well developed to do their work. If too muscular, it is only so much extra weight to carry, and they should rather be below than above the proportionate size, as compared with arms. This form has been apparent in most of the best oarsmen.

After the moving powers, it is necessary to consider the state of the lungs and the heart. The wind should be naturally good and free from wheezing or a lingering cough; and the heart should be healthy and free from palpitation or excitement. This can only be ascertained by a trial, and, indeed, that is the best mode of arriving at an opinion on all the different essentials for this as well as all other bodily exercises.

With regard to size and weight, much must depend upon what is to be done. Every pound added to the ordinary proportion of muscular power, is a dead weight in the boat. Strength, muscle, nerve, and elasticity, are the attributes to be sought after, and all weight beyond what is necessary to secure these had better be discarded. In the old boats which were formerly in vogue, it was necessary to have more weight and size at the end of the oar than can be rendered available in the present style of light boats. The breadth of floor of the old style boats was such that the increased weight did not bury the boat so much as it now does, and consequently the attendant disadvantages were not so great as at present.

APPORTIONMENT OF THE WORK.

After selecting the men who are to form the crew to be trained, it is desirable, if by any means it can be accomplished, to keep them together day and night; at all events they should take their runs and meals together. In most cases it is better to take lodgings on the nearest high and dry spot to the water.

It is commonly supposed that, in training, early hours are required, and with those who have been all their lives accustomed to them, no doubt they are; but when the habit has been different, it is much better to allow a moderate indulgence in the morning's bed, rather than attempt to break through long established customs, to which the constitution has been inured. If the training is in the height of summer, it is desirable to get through most of the work in the cool of the morning and evening, but if the weather is not very oppressive, says the writer in the "Rural Sports," the plan is not a good one. The following rules, subject to variation, according to the time of the year and the state of the weather, are considered necessary to be adhered to :—

All should turn out of bed at seven o'clock in the morning ; they should be well sponged all over with cold water, or they may take a plunge into the river and out again. On no account should they remain in the water even for five minutes. They should then be well rubbed with a coarse towel, and be dressed by half past seven. They should then take a gentle run or smart walk for half an hour, and be ready for breakfast at eight, without fatigue, but prepared to enjoy it. After breakfast a couple of hours may be passed in any innocent but not violent bodily amusement, such as billiard playing, light quoits, &c. This may be enjoyed up to half past ten, at which time the crew should be mustered in the boat, and commence to take their morning's practice, which on the average will occupy them two hours, and bring the time to half past twelve. On getting out of the boat all should take a good run. At one o'clock, or half past one at latest, after being rubbed dry, and the linen changed, dinner may be announced, and this meal may occupy the time till two or half past two P. M., according to circumstance. After dinner a gentle stroll or a book may be indulged in till five or six o'clock, when the evening practice on the water will commence, and consume an hour. On coming in from the row supper may be partaken of at half past seven, and at nine or ten o'clock to bed.

THE STROKE OARSMAN.

The best oarsman is not always the most proper person to entrust with the stroke oar. Many men are exceedingly good behind another, who yet have so little judgment, and in some instances are so deficient in time, that they often throw out a crew when placed nearest the coxswain. A stroke, therefore, requires to be not only a good oar, but of indomitable pluck, so as to be able to get up a dash whenever wanted, and to rouse an exhausted crew by the force of his example. He also ought to possess great presence of mind, in order to enable him to avoid hurrying his stroke when pressed, and a keen perception of time, so that he shall not vary it more than is absolutely required.

EACH MAN'S PLACE.

Having made a proper selection of a stroke oarsman, the next point is to allot to each man his proper place, which can seldom be done without a few trials. Having as near as possible decided upon the place which each is to occupy, the next point is to bring every man up to the standard of the stroke oar.

PRACTICING IN THE BOAT.

In a previous paragraph two hours are allotted for the morning practice and one for the evening. This will be quite sufficient, as the crew would not derive much benefit by practicing more than three hours a day.

On the point of starting it is prudent to allow matters to take their own course for a couple of miles, keeping up a steady, long and rather slow stroke, all rowing as carefully and as well as they can. As soon as the boat begins to go along tolerably steady, it will be time for the coxswain to look for the particular oars which requre correction. It will be generally found that after an hour's steady pulling the crew begins to improve rapidly, and then it will be better to rest for eight or ten minutes. After this little break, during which stretchers may be more satisfactorily adjusted or any other necessary alteration made which it is convenient to do, the remainder of the practice may be filled up by another steady pull, with the same long, steady stroke, not too quick through the water or on the feather, so that all may keep up to it without distress.

It is of the greatest importance towards getting a crew to row well together not to let them at any time row in a careless or slovenly manner, and not to practice them when so tired as to have lost their control over their oars. Hence, rowing twice a day is far better than doing all at one time.

The evening row should be conducted on the same principles as the morning's work. In a few days it will be found that by continuing these long, steady pulls, the rowing is so much improved that a " dash" may be attempted ; but this should be done only after the coxswain has cast his eyes down the oars, and is satisfied that all are fully under command. He should then ask the stroke oarsman if he is ready, and on receiving an answer in the affirmative, let him order the crew to prepare for a dash. This is very necessary in the early days of training, as it puts all on their guard, and after the long steady practice, the attention has been in some measure taken off by the uniformity of the stroke, and the mechanical nature of the work. The dash may be continued till the boat begins to rock, when it is better for the coxswain to give the word to "ease all" than for the stroke oarsman to attempt to alter the stroke into a milder one. For the first ten days two or three spirts in each practice, continued for about forty or fifty strokes, will be quite sufficient.

By steadily and patiently proceeding in this way it is astonishing what improvement will be apparent at the end of ten days, at which time it will be necessary to begin to row the distance which is to be the scene of the contest. Whatever that distance may be, whether with or against the tide, the same water, if possible, should be rowed over twice a day, and the time should be carefully taken by the coxswain. The reason for this last proceeding is not only for his information and guidance, but also for the purpose of keeping the whole crew up to their work, and noting the improvement which the practice will produce. It is in fact rowing against time, instead of against another crew, and there is consequently some emulation excited, which is one grand principle in training.

It is not perhaps desirable, nor is it in fact possible, to distress men as in a race, for no crew could ever propel a boat at the same rate of speed when rowing against time that they could when engaged in a closely contested race.

TREATMENT ON THE DAY OF THE RACE.

In every respect let the walking exercise in the morning and breakfast be as usual. The crew may then amuse themselves in any moderate way, keeping all the time together until about three hours before the race, when they should each have a good meal of roast mutton, with bread and a pint of beer, or whatever drink they are accustomed to. The quantity should be rather under the usual allowance. Just before stepping into the boat a wine glass of egged sherry may be given to each man, but this latter drink is not ordered on the ground that it will have any particular beneficial effect. No doubt it gives power, but in many cases it injures the wind, and in delicate stomachs it often produces nausea.

Unless, therefore, it has been proved to agree it should be cautiously administered.

THE DIET.

BREAKFAST.

There is no doubt that the very best food for breakfast is oat meal porridge, with the addition of a certain allowance of beef or mutton, and a little bread; but many have the greatest objection to this diet, and never eat it without loathing. For them the next best beverage is a pint of table beer, not too strong, with a larger allowance of bread. It is not desirable to stint the appetite, unless very enormous, or unless there is a superabundance of fat, but it will in most cases be found more advantageous to reduce the weight by work and sweating than by starvation. Tea and coffee are not good for training purposes, though if not taken too strong or in too great a quantity, they are not considered actually bad; cocoa is too greasy, and not so good as tea, which, if taken, should be black by all means. Butter, sauces and spices should be carefully avoided; and nothing but salt and a very slight dash of black pepper used as a condiment.

DINNER.

This important meal should consist of roast beef or mutton, and occasionally boiled mutton; but veal, pork and salt beef or bacon, should be avoided; also goose, duck, and wild fowls generally. Roast fowls or partridges are very good, without high-seasoned stuffing. Nothing is better than venison when it can be obtained; but it should be eaten without seasoned sauce or currant jelly. As to vegetables, potatoes may be eaten, but very sparingly, not more than one or two at a meal. No other vegetables ought to be allowed. Bread may be given *ad libitum*, with about a pint of good beer or ale. If this does not agree, a little sherry and water, or claret and water, may be allowed with the meal, and a glass or two of the former wine, or good port, will do no injury after dinner. Nevertheless, by a strict adherence to temperance principles nothing will be lost. Bread pudding may be added to the dinner occasionally. Nothing disorders the stomach more than keeping to one diet, but any change from the above must be as light and as temporary as possible.

SUPPER.

Oat meal porridge is for this meal the best; and no one will be the worse by taking a pint of it, with some dry toast to eat with it. Meat is not necessary at night, except in very delicate constitutions that require unusual support. In such cases a chop, with a glass of port wine or egg and sherry, will tend greatly to keeping up the strength.

REMARKS ON DIET.

Nothing is so likely to destroy a boat's chance as a variable state of condition in the component parts of the crew. It is far better that all should tire equally, than that half should give out early in the race, while the others are capable of using their full strength. Hence, some will require much more liberal and generous diet than others. If, for instance, the habit is gross, and the appetite good, it will be needful to allow only the plainest diet, and to vary it very little. By this precaution enough and not too much is sure to be taken. If, on the other hand, the constitution is delicate, with a want of appetite, want of digestion, and tendency to too great a loss of flesh, then it is desirable to allow considerable change from day to day, and as far as prudent, to comply with the particular fancies of the palate.

REMEDY FOR DISTRESS.

In the early days of practice, and in the race itself, great distress sometimes occurs; there is considerable blueness of the face from congestion, and the breathing is labored and difficult. The best remedy for this state is a glass of warm brandy and water, and plenty of hard friction on the feet, legs and thighs, or, if it still persists, a warm bath at ninety-eight degrees.

RUNNING EXERCISE.

The speed and length of run which is to be daily maintained, in order to obtain that condition of the lungs and heart which shall enable the oarsman to go through his task, must in a great measure depend upon the state of the individual. In giving directions, it is assumed that the health is good, that a fair amount of exercise has been habitually taken, and that the body is prepared to go through its task without risk. In a previous paragraph it is directed that all should have a walk or run for half an hour before breakfast; in most instances a smart run of two miles or over, will be about the best, and two or three running together will add to the excitement, and take off from the weariness of the task. But the excitement which will naturally arise when a plurality of persons are running together, should not be allowed to get the better of judgment and lead the individuals off into a friendly strife, as the over exertion which that would entail would produce more injury than if the running was not admitted into the practice. The pace should vary from five miles an hour to an occasional spirt for a short distance at nearly the top of the speed, interspersed with hopping and leaping. The speed, however, is never to be maintained to an extent productive of much perspiration, and if the weather is very warm the hours should be early in proportion.

THE DRESS.

The dress should be flannel trowsers, with a light woollen jacket, and should never be so heavy as to weigh down the animal spirits. Nothing is of more importance than this, for much depends in training upon keeping up that buoyancy of feeling, which man in a state of high health ought to experience. Great care should be taken to be cooled down before getting into the boat.

METHOD OF ROWING AN OAR.

A pamphlet has been published in England which calls attention to the method to be observed in using an oar, and divides it into three heads, as follows :—

1.—The Seat.

2.—Holding the Oar.

3.—The Stroke.

The instructions are then given as follows :—

A man must sit well above his work in order to command it properly. The datum for ascertaining the height at which this advantage is secured is the following : In a properly constructed boat the thwart is placed midway between the heelboard and the sill of the rowlock. When a mat is added, the man is sufficiently elevated to sit well above his oar's handle, and to wield it with facility. If he sits too low he will row with a rounded instead of a straightened back, and incur loss of power. If he sits too high, he will be himself unsteady and liable to roll; he will also make the whole boat unsteady and liable to roll by unduly raising the center of gravity. He will also alter the angle at which the oar lies over the gunwale towards the water; the least inclination is the best. The most commendable form of a rowing mat is a thick twilled flannel taken several times around the thwart, quite flat, and extending several inches beyond the space actually covered in sitting. It is tied by two broad tapes, fastened in a bow underneath the thwart, and against its forward edge. Half the miseries endured by rowing men, and half their faults, originate in the maladjustment of their seats. They are never flat enough, seldom long enough, and usually the thwart itself is built in too low. But there is another point in the position of the thwart which is of paramount importance, viz: its horizontal distance from the thole. Such fantastic tricks have been played with this relation of thwarts to tholes, and such fatal injuries to rowing have resulted from them, as to render it necessary to define in the most stringent and exact terms the true position of each.

Supposing oars to be made, as they usually are, three feet five inches long in board, the distance at which the thwart and bowl may stand apart must not exceed thirteen inches measured horizontally. If oars should be three inches longer in board, a slight trifle above this datum might be allowed, especially if the oarsman were a very tall man. We should waste pages in assigning all the reasons adducible in proof. But there is one which may serve for the rest, easy of comprehension, and drawn from that best of sources, a known law of man's powers. In turning a windlass, it is well known that the greatest dynamical pressure is obtained by a man between the points at which the handle is nearest the ground and its reaching ninety degrees above the ground; *i. e.* in the first quarter of the whole revolution from the point opposite the zenith. Then it is that the greatest purchase is fetched from the legs and feet. After that angle the pressure diminishes till the same point is again reached. Now observe that this motion is exactly analogous to that of rowing. Starting from the moment of contact with the water, when the blade is farthest forward, the tension is greatest up to the end of the first division of the stroke, that is, till the oar has attained ninety degrees or its right angle to the rowlock; after that the force applied begins to decline. It is obvious therefore that by diminishing the length of arc traversed by the blade prior to the rectangular position you diminish the power of the stroke. By as much as you diminish the more valuable portion of the whole arc's length, you add to the less valuable. You detract from the space in which force is used most advantageously, and increase that in which it is spent with loss. Put in aquatic form, this amounts to getting shorter forward and longer aft; a ruinous fault. But such is the immediate and necessary consequence of setting a man too far off from his work. In whatever position he may be put, the honest oarsman sets himself to row out the whole of his reach, remembering it always as the first article of his creed; and when prevented by undue distance of his thole from getting his blade forward enough beyond the rectangle, he can only compensate the deficiency by lying just so much farther back past the rectangle. In any case his hands will attain an equal length of forward reach from his shoulders, and the arc traversed be equal in length, but it is very unequal in power and effect. The first and vital part of the stroke is greatly damaged by the necessity of the after compensation.

Let us say again then that thirteen inches shall be the limit of distance between thwart and thole. Put a man of decidedly short reach even nearer by two or three-eighths of an inch. These slight differences are not at all slight in consequence.

As accurate measurements have been taken on this subject, hitherto not properly investigated, it may be as well to give here an idea of the relative divisions of the arc rowed through.

If an oar be, as at the present day, twelve feet five and a quarter inches long, nine feet without and three feet five and a quarter inches within board, the whole arc described by a man of average reach will be about eight feet; but of these ninety-six inches more than two-thirds are allotted to the first portion up to the rectangle, the proportions being near sixty-four and a half to thirty-one and a half in the latter. Now an increase of three and a quarter inches beyond our fixed datum between thwart and thole will substract one-quarter from the valuable part of the work and add so much to the weaker, in fact it will just divide the space by the rectangle, having four feet on each side of it.

Yet men have been before now placed at this distance and even beyond it, up to seventeen inches. Let such amazing folly be no longer heard of among rowing communities.

This part of the work is brought to a conclusion with the following allusions to the art of feathering :—

As to the position of the blade after it is feathered, and while traversing the air for a new stroke, it seems best to preserve a medium between a perfectly horizontal line close to the water and a great elevation above it in a long curve. A high toss composed of a single straight line up to the point of culmination is quite inadmissible. When water is rough and lumpy, or when it is thrown up in a mass by a strong man behind you, there is danger of catching it if your oar is low. Again recovering forward in a high curve catches the wind, causes an ugly flop in the water, instead of the clean unsplashing cut, and involves a certain waste of labor. A very gentle curve is the most commendable form: and, as it is attained by a simple and inexpensive motion, and ensures safety in rough water, it is to be preferred. By a very slight depression of the hands the blade is a little raised at the beginning of the traverse, and by a subsequent check to that depression it descends gently to the surface without any hang and without any splash. Thus did Edmund Stanley, the *beau ideal* of an English oarsman, row.

In an appendix the folly of attempting to teach young hands by placing them at once in an eight, with an oar in their hands, is described as follows :—

Now how can a man be taught rowing, from its initiatory movements upwards, in an eight oar? All that can be expected of him is that he shall pull the implement put into his hands somehow, but that "how" he knows not, nor even how to begin setting about it; he has to dip his blade into the water and get it out again in any manner he can devise in his helplessness. He cannot be shown how to do it, perched up on the thwart of a long, narrow craft, in which he sees nothing but certain motions of backs before him, and cannot himself be seen, and in which he must comply with a rapid merciless movement of the boat at every shoot, tied down to row a given stroke, that is, to pull through a given area of water in a given time, repeated and repeated without stop or stay, or opportunity of rest, or reflection, or rectification of his desperate condition.

There are three obstacles to his learning, which would not exist in a reasonable method of instruction; he cannot see, he cannot be seen, and he must row in uniformity with a complicated machine which hurries him resistlessly along. How can he learn anything in such circumstances? He is bewildered, helpless, breathless, cramped, exhausted, in excessive pain; but scramble on he must to the end, a wretched object, and most ludicrous were he not so truly pitiable. You cannot teach a raw beginner, and make an oarsman out of him in a long boat. Consider if it must not be so.

All that a novice can know by the light of nature is that he must sit down on the seat alloted to him, and hold the piece of timber given him by the round handle instead of the blade, and rest his feet against the stretcher, and strike the water after some fashion. But he cannot sit upon that seat rightly by intuition, still less does he know how to grasp that handle, and less again how to force that blade horizontally through the resisting medium. Nor can he be taught from the stern of such a boat to perform any of these actions when it is motionless, simply because he cannot be wholly and properly seen, and has nothing to look at by way of practical exemplification. But once in motion and hurried away by a violent shoot into a series of distorted gestures, which soon distress him, he can be taught nothing intelligibly to his own mind, and has no power to follow even if he should understand his directions.

We cannot endorse all that we have quoted from the pamphlet mentioned, as will be obvious to a a large number of our best oarsmen. It is of course plain that a beginner is not a rower by nature, but we hold to the opinion that a great deal can be learned in a four or six oared boat by imitating the stroke, if he is an accomplished oarsman, and such of course he should be.

FAULTS IN ROWING.

The chief faults in rowing are :—

First.—The bending forward over the oar at the end of the stroke, called "meeting the oar," and which is attended by the taking in too small an extent of water.

Second.—Making the latter part of the stroke in the air, which is the usual expedient in shirking, often also accompanying the first fault.

Third.—Rowing round; that is, not dropping the blade at once to its proper depth, but describing a segment of a circle, and thus having to bring the oar up out of the water to feather, by which the boat is dragged under, and her way impeded.

Fourth.—Rowing with the elbows bent, either when on the stroke or the feather, or both.

Fifth.—Keeping the elbows out from the sides, which is only bad in appearance. Some of our best oarsmen are addicted to this fault.

Sixth.—Looking at the oar to avoid crabs, which only leads to uneven swinging, and often the very thing which is intended to be avoided.

Seventh.—Looking out of the boat at passing objects, or at the competitors in the race. The coxswain will do all the looking out that is necessary, and indeed he cannot perform well his duty unless he has a clear eye to every chance which can be made available, and to the avoidance of every obstacle which may tend to impede the progress of the boat.

There are other faults in appearance, such as dropping the chin upon the breast, rounding the shoulders or back, &c.; but they do not so much affect the real work done, as the faults above enumerated. These latter may be often found in a good rower, whose oar itself, if watched, would be pronounced to be that of a finished oarsman.

SCULLING.

Sculling is practiced exactly on the same principles as rowing, except that both sculls being managed by one man he has only one hand for each. He sits in the middle of the boat, and pulls them exactly as described in rowing with the oar, taking especial care to pull alike with both, and entering as well as feathering them precisely at the same moment. A neglect of this precaution is attended with danger; and, in fact, in light outrigger boats it is only by the practised hand that the time can be so nicely regulated as to admit of their use without an upset.

SETTING IN THE BOAT.

The sculler is, first of all, obliged to have recourse to a wide and steady boat; and when he can manage her well he may venture upon an outrigger; carefully stepping into which, while she is held, he sits down and gets all right, while still steadied, and he only ventures to give up his aid when he has his sculls out ready balanced, and at first lying with the blades flat on the water.

KEEPING THE COURSE.

A straight course is kept partly by watching the stern and keeping it in a line with some object, and partly by turning the head round (not the shoulders,) when, having taken a sight, the stern is set to some fresh object, and maintained in a line with it till the next look ahead. This is one of the most difficult parts of sculling, and few men are able to steer well in a race without the assistance of a man behind them in another boat, who keeps directing the course, by calling "pull your right," or "pull your left," as the case may require. In matches, an eight, six, or four oar generally accompanies each sculler, who is able to direct to a nicety the course to be kept, and the sculler has only to lay out to the utmost of his power; and if this is done by both it is fair enough, and leads to an avoidance of fouls which are the bane of the rowing match.

THE SCULLS.

The sculls should overlap each other from four to six inches for over-hand sculling, in which one hand passes over the other; but this is sometimes avoided because the rowlocks may be made wide enough apart to allow a sufficient length of loom without it, so that the length of the irons added to half the width of the boat, gives the length inboard of the scull.

BOAT CLUB MANŒUVRES.

PREPARATORY ACTION.

Every man should have his rowlock just wide enough for him to touch the stopper with his oar at his full reach forward, and he should in starting commence at that point, the hands being well over the toes, and the blade of the oar at right angles to the surface of the water, and about a foot from it, more or less, according to that of the stroke, who must be rigidly imitated, or confusion ensues. The body is bent forward at the hips only, and between the thighs; the back being straight, the shoulders freely extended and the head well up, with the eyes looking horizontally forwards.

DROPPING THE OAR.

The dropping of the oar, previous to pulling, must be rapid yet light, and without the slightest splash or chop.

THE PULL.

The pull commences almost the instant the blade touches the water, because the elasticity of the muscles and of the oar are first to be overcome; and when they are so the oar is deep enough and the pull should commence. This is a very nice and difficult point to calculate, and nothing but practice will give the exact moment at which to begin to use the back; but to a casual observer, watching even a finished oarsman, it appears as if he began to pull as soon as he had dropped his oar; yet it is not really so, and no power is actually laid out until the blade has reached its full depth. At that instant the body, which has been falling backwards for an exceedingly short space of time, is checked by the arms, which are all this time straight at the elbows, and the back is now exerted to drag the oar through the water until it reaches its full extent of swing, which is a little beyond the perpendicular, on the average, but more or less according to the difference of style.

As soon as the full swing is attained the arms bring the oar home by bending the elbows, keeping them close as they pass the hips, and throwing back the shoulders at the same time, when the stroke is completed by depressing the inside wrist and elevating the knuckles, in which the inside hand also follows, causing the loom to rotate on the rowlock, and changing the direction of the blade from being verticle to nearly a horizontal position as it leaves the water.

At the conclusion of the stroke the root of the thumb of the inside hand should touch the ribs, the back is straight and inclining a little beyond the perpendicular, with a graceful fall of the shoulder blades, accompanied, as a matter of course, by a fullness of the chest, and the head carried easily, but with the neck not at all bent forwards.

When the knees are held wide apart they are very slightly brought together during the stroke; but when they are kept comparatively close together throughout they do not change at all.

THE RECOVERY.

The recovery, which consists in first straightening the wrist, by which the oar is at the same time rotated and thrust forward for the second action, is a necessary part of the first; secondly, of a straightening of the elbows and a darting forward of the shoulders; and thirdly of the bending of the body at the hips as far forward as possible over the toes, with the blade of the oar in the verticle direction, which brings it to the exact point from which we started.

The whole of these acts may be executed slowly and lightly. When they are performed with great power, yet with a long stroke, and with as much quickness as is consistent with lasting the distance to be rowed, it is called "rowing hard;" and when the velocity is the highest of which the crew is capable for any distance, however short, it is called "spirting," or making a dash.

The average number of strokes in an eight oar, for ordinary pulling, is about twenty-five per minute, for rowing hard about forty-two, and for a "spirt" from fifty to fifty-five.

STARTING.

Starting is effected by all rowing off at the same time, beginning with the position described under the head of "The Pull," or within a short distance of the utmost reach forward, and giving two short strokes and a long one, when intending to get quickly off. In ordinary cases, however, it is better to start with the usual steady and slow stroke.

HOLDING WATER.

Holding water is necessary when the boat is to be suddenly stopped, in which case both sides of her crew, at the command of the coxswain of "hold water all," according to the speed at which they have been going, drop the blades of their oars more or less into the water, holding their arms straight, and keeping the inside hand firmly upon the loom, to prevent the water sinking the blade too far under, and thus causing a crab. It is a very difficult manœuvre to execute well, and is not often wanted in racing, except when a buoy or stake boat is to be turned, when one side holds or backs water while the other rows the boat rapidly round. Practice is the great point in this manœuvre, as the principle is simple enough, and nothing but long practice will enable a crew to turn a boat with promptness and success. In the English regattas the stroke oarsman often takes hold of the buoy or stake boat, if he can do so easily, and can facilitate the rounding thereby.

"BACK ALL."

Backing is effected by the oar, held as in the last manœuvre, and used as in rowing, but exactly in the opposite direction—pushing the blade through the water and pulling it through the air. The blade should be neatly feathered at the moment of leaving the water, and great care should be taken not to dig too deep, and to back in good time, and with the same length of stroke. There is no possibility of swinging beyond the perpendicular, and it should not be attempted, but all the work must be done before the thwart, reaching well over the toes. Where the whole crew back water neatly and in good time it is a very pretty sight, and the boat glides swifter through the water than might be expected.

EASING.

Easing is merely ceasing to row, in which all should stop exactly at the same time, and the coxswain should in all cases give the word "easy all" at the end of the stroke, when the oars should not be wholly recovered from the feather, but should be half way between the horizontal and the perpendicular, and at right angles to the boat, so that as soon as the way is a little off her they may lie flat on the water, and thus prevent her being unsteady by their powers of balancing.

LENGTH OF STROKE.

The best length for the stroke is that which all in the boat can well maintain without reaching so far forwards as to be unsteady in the drop, or swinging so far back as to bear too hard upon the oar, and thus occasion a downward pull upon the boat.

It is of no use for the stroke oar to overreach his crew, though at the same time he should be able to excel them all, in order to improve them and draw out their powers to the fullest extent.

It is clear that the only limit to the length of the stroke is the reach forward, which is limited by the bend at the hip and the swing backward, which must be confined within the bounds dictated by a careful observation of the several styles of the men composing the crew; hence, if any of them are slow and clumsy in recovering their oars, the swing must be kept within due limits, for fear of their failing at this important time; and the same caution should be observed with the reach forward.

STYLE OF STROKE.

In laying out the strength, the grand and essential point in light boats is not to jerk; but beginning with a delicate drop into the water, and without a splash if possible, the rower should catch hold at once, and then gradually increase the power until the resistance begins to be removed by the near approach of the blade to the surface, when the whole attention and also the muscular effort of the arms are absolved in making the feather; and consequently there is, or ought to be, no vibration or jerk, and yet the root of the thumb should be brought close up to the ribs.

FEATHERING.

The feathering is strictly the turning of the blade from the perpendicular to the horizontal direction, by a raising of the knuckles towards the back of the fore arm, and consequently bending the wrist; but the oar is said to be on the feather from the time that it is thus turned until it re-enters the water, although the direction is recovered as quickly as possible after the change is made from a backward to a forward motion—some contending for a very quick feather, some for a very high one, with a sort of hovering in the air at the end, and some for a slow feather without this raised hover.

In the time of the old heavy boats, says a British work on rowing, quickness of feather was all important, because they would not continue their shoot long when off the hand; and two boats nearly matched in a race might be seen alternately leading, according as they were at the moment on or off the stroke, consequently the time occupied by the oar returning in the air from the stroke was comparatively lost, because the boat was losing her way all the time, and in a very slow stroke was almost stationary; but in the modern narrow boats the speed, after the stroke is finished, continues for a considerable period of time, and if while this full velocity lasts the oars are dropped into the water in a clumsy manner, she may actually be seen to stop—as often, in fact, really happens in a young crew trying to row faster than they ought.

It is therefore found now that a stroke which does great execution in the water, without laying any great stress upon the quicknes of feather, is the most telling one; and that strength, applied in the proper way, together with a finished drop into the water and a clean feather, is the essence of the art.

In all quick strokes the feathering is necessarily also quick, and without any attempt at increase of pace in that department, is quick enough; and hence there is no necessity for the old caution "to be quick forward." This avoids a great expenditure of power, which formerly was laid out in saving the time lost in the shoot, and it is one of the great advantages of the long, light and narrow boats.

If they are handled with skill, and not rowed too deep or jerked, they are beautiful in their shoot, and it is scarcely possible to detect the slightest alteration in their speed at any moment.

Again, they require that the swing shall not be too far back, because in recovering from this long swing some weight must be thrown upon the oar, and the boat is made to dip bodily from her narrow floor affording too slight a resistance. A very little beyond the perpendicular is therefore the proper swing in most cases, though in some few the proper recovery is so completely mastered independently of the oar, that the full and long swing, as of old, is developed without the dip.

It is clear, therefore, that the long swing is not necessarily bad, but that it requires great skill to combine it with the proper recovery; and hence in an amateur crew, as it is difficult to meet with anything like perfection in all, it is better not to attempt to carry it out to the extreme, but to swing only about two-thirds of that amount.

That portion of the foregoing which describes an old heavy boat as coming nearly to a stand still when off the shoot, will meet with considerable opposition in this country, as attacking a fact. It is very generally considered here that the old heavy boats held their headway much better than the present style of long light boats. The speed of the former was more regular and apparently unchanged, while the latter moves quicker on the shoot and falls off in her speed when the oars are out of the water.

KEEPING STROKE.

Keeping stroke is the imitation of the stroke oar by those behind him, in power used and in the length and depth of the water taken, in which particular, if they exactly follow him, they are said to "keep stroke."

A shirker cannot keep stroke, though he may keep time; and it is only by watching the oar and the work done by it, that the coxswain can detect this fault. It is not so unpleasant to the ear as the defect in time, but it is quite as fatal to the good progress of the boat, and indeed some times more so, because the variable ending of the stroke is of more consequence than the want of time in beginning it, or rather in feathering, which is the process by which time is marked.

The speed of the boat is entirely dependent upon the swing together of the men, and their laying out their strength at the same moment, to the same degree, and in the same direction. So important is keeping stroke that a crew of men pulling well together will always beat a crew of better men who row in various styles and without simultaneous action.

KEEPING TIME.

Keeping time is the feathering of the oars and their recovery, executed exactly together by the crew; and it may be carried out to a tolerably full extent by a crew some of whom are accomplished and confirmed shirkers, while the others are doing good work.

SHIRKERS.

The practiced or accute ear will generally detect a slight want of accord, for though the time may be very good there is a just perceptible difference in the sound produced by an oar doing its duty from that made by a shirker. This will lead the coxswain to examine the oars themselves, and he then sees how they perform and at once detects the offender; though in an eight oar boat there is great difficulty in examining the oars in the forward part of the boat, and they can almost defy detection if clever and accomplished shirkers.

THE COXSWAIN.

The coxswain's duty is by no means the least important in boat racing, and he often makes considerable difference in the length of water rowed over and the strength of the current to be rowed with or against. The coxswain, in racing, should be as light as it is possible to secure one. But lightness should not signify tender years in all cases, as practice and good judgment must not be thrust aside to make way for less weight; but there is no doubt that every pound tells in a boat as well as on a horse. A few pounds, says our trans-Atlantic cousins, may nevertheless be safely added to secure an efficient steerer in a sharply contested race.

It requires considerable nerve to keep a boat in her course when pressed close by another, and yet the giving way oftens entails the loss of the race. One great cause of the failures in steering is, that the coxswain has not been allowed the amount of practice with his crew which his office requires. Very often he has only been in the boat once or twice, and sometimes he never steered half a dozen times in any boat at all. The coxswain wants teaching as much as the oarsmen, and if not allowed to be in his own boat he ought to have practice in another.

PRINCIPLES OF STEERING.

The grand principles of steering are to keep the course which is laid down from the first with as little meddling with the yoke lines as possible;

to keep these taut, so that the rudder is quite fixed and incapable of shifting, and when compelled to use them to be careful to do no more than is absolutely necessary, so as to avoid having to rectify an over-shoot to the right by suddenly steering again to the left.

In going round short points, if the men pulling the outside oars are stronger than those pulling the inside, they may be called upon to pull harder, thus: "pull bow side," or "pull stroke side," but if they happen to be the weaker half of the crew, and they are liable to be afterwards overdone, it is better to "ease" the other side. Either of these is better than using the rudder too strongly, which impedes the boat, while it also keeps the men doing their utmost; and it will be found in practice that a boat will go round a point in less time by easing one side, than by steering round with the full force on, whilst at the same time the strength of the men is husbanded.

The coxswain should also study the current and take advantage of the slack water, if going against it, or the full current if with it; and this he must do according to his position in the race, which will be constantly varying in different contests and localities. In every case he should steer over the course several times beforehand, and should make every object perfectly familiar to him at first sight.

WORDS OF COMMAND.

The coxswain's words of command to the crew are as follows:

" Pull all."

" Ease all."

" Pull bow side."

" Pull stroke side."

" Pull bow," or number two, or three, or stroke, as the case may be.

" Back water all," or any portion.

" Look out," when any obstacle is in the way.

" Ship oars," or oar, directed to any one or all.

With these words of command he manages the boat and crew.

WHO COMMANDS.

The Commodore, Commander, Captain, or by whatever title the head man of a boat club may be styled, should have no command of the crew while in the boat. The whole authority is, " and of right ought to be," vested in the coxswain, while upon the water. For he is the only person who can detect faults, note the progress of the boat, see how she heads, determine whether the pull is even or not, and direct which side requires the greater or less power. English authority tells us that no boat's crew can be properly trained except the coxswain has full power while in the boat. This should be borne in mind.

The directions which we have given under the general head of "manœuvering," it will be seen, are intended for race boats and racing, but with few exceptions they are applicable to the rowing and managing of barges.

THE EMPIRE CITY REGATTA CLUB.

The Empire City Regatta Club was organized in New York in the year 1855. Its main objects were to encourage oarsmen and institute a spirit of generous rivalry among rowers generally, by giving annually a regatta on a magnificent scale. The organization owns no boats, nor indeed any other property beyond what is actually necessary, and all funds received by initiation or from dues and fines, are appropriated to the prizes which every year are offered.

It numbers now about sixty members, who were admitted on the payment of each of one dollar, and who continue in full membership by annually paying the same amount. The by-laws of the club are similar to those which govern all societies, and are based on the most liberal views.

The crews of all boats that enter at these regattas must be members of the club or they cannot become contestants, except they hail from places fifteen miles distant from the metropolis, in which case they are as free to contend for the prizes, by paying the entrance fee, as though they were recognized members of the organization.

The following is a list of prizes which were given for the first regatta, which took place on the Harlem river on the 17th of October, 1855 :—

FOR FOUR OARED BOATS.

First prize,	Purse	$100
	Silk flag	25
Second prize, purse		40
Third prize, purse		10

FOR TWO PAIRS OF SCULLS.

First prize, purse	$20
Second prize, purse	10
Third prize	2

SINGLE PAIR SCULLS—CHAMPIONSHIP.

First prize,	Champion Medal, value	$130
	Purse	100

Second prize, purse	30
Third prize, purse	20
Fourth prize, purse	10

The entrance fee was ten dollars for the four oared and single pair sculls boats, and two dollars for the two pairs of sculls.

No restrictions have ever been placed upon the four oared boats in any of the regattas given by the club, further than stipulating the number of oars to be used. They have carried coxswains or not, just as they chose to elect, and the length of their boats was left entirely to the exercise of their own taste and judgment. At the first regatta there were five boats entered of each class, and all started in their respective races.

DESCRIPTION OF THE CHAMPION MEDAL.

The Champion Medal mentioned above as part of the first prize in the scullers' race, is of silver and gold, three inches in diameter, and about half an inch in thickness. Carved laurel leaves surround the edges, which are silver, and on the top is an eagle bearing a miniature boat in his bill. On the front is a golden shield, on which is engraved the names of the officers of the club: Stephen Roberts, President; Geo. A. Cook, Vice-President; J. D. R. Putman, Secretary, and Geo. W. Warner, Treasurer. The reverse contains a marine view, representing a regatta, spiritedly executed. The medal cost $130, and is the most magnificent one of the kind ever manufactured in this country.

COLLEGE BOAT CLUB CONGRESS.

The first convention of boat clubs, of which we have any knowledge as having taken place in this country, was convened in New Haven on Wednesday, the 26th day of May, 1858. At this convention the following colleges were represented by delegates :—

Harvard College, Yale College, Brown University, and Trinity College.

They organized themselves under the name of the College Regatta Association.

The object of the Association was to make arrangements for an annual grand Union Regatta. The following resolution was adopted :—

Resolved, That there be a regatta instituted between the Colleges of the Union, and that at each regatta the time of the next regatta be determined.

Charles M. Smith, of Brown University was chosen Secretary of the Association for the ensuing year.

A Hartford journal, in referring to the above convention, says that the practice of boating, which for many years has been carried on to a great extent in England and other countries, has until within a few years, been entirely neglected by our American youth; being considered as an exercise too violent to be indulged in with much pleasure to the participant.

The mistake was not corrected until some fifteen years ago, when young men began to see their error and form boat clubs for the purpose of indulging in this manly and beneficial sport. Since that time, an interest in boating has steadily increased, and particularly in our colleges, where at this time are to be found the fastest boats and the best amateur boatmen in the country.

The interest in the subject is at present very great, and increasing rapidly. Colleges where for some years boating has been an old story, are paying much attention to it, and colleges where the subject has not been thought of are organizing clubs and introducing this most healthy practice.

Harvard University, of Cambridge, Massachusetts, stands first. The skill of her boatmen, together with the speed of her boats, have enabled her to take the prize several times, from Yale College, New Haven, Connecticut, and from Dartmouth College, at Hanover, New Hampshire. She has also competed nobly with the Boston clubs, acquitting herself with credit wherever she goes. The Harvard navy is large, containing many first class boats.

Yale stands next, and although beaten by Harvard, has reason to be proud of her navy. Yale has about fourteen boats, nearly all of which are fast.

Of other colleges, Dartmouth; Brown University at Providence, Rhode Island; Trinity College at Hartford, Connecticut; Columbia College, New York city; and the University of Pennsylvania, each have a greater or less number of boats, and all take much interest in rowing.

It was in view of all these considerations that the Commodore of the Harvard navy conceived the idea of an annual regatta by all American Colleges, for the purpose of increasing the interest in college boat clubs, and for improvement in rowing and general boating knowledge.

The idea was suggested by the annual contests between the University clubs of Cambridge and Oxford, in England, where boating is carried to a great extent, and has arrived at great perfection. These University races are between two boats, one manned by a crew from the different colleges in Oxford, the other from those in Cambridge. The race draws immense crowds, and is looked upon with the greatest favor by all.

The proposed College Regatta would be far more attractive than these, for if each college should send one or two boats, the contest would be between ten or twenty boats, and present a spectacle unequalled by any similar display which has ever taken place in America.

To make this plan practicable the co-operation of the public will be necessary. They must interest themselves in it and help it on. Colleges near the race ground will readily enter; but to enable distant clubs to be present the public must be liberal.

Towns raise money for fairs and celebrations, because it is for their advantage; but no fair or celebration will draw as well as such a regatta. To make this a prominent and general affair, the towns whose rowing privileges are good should offer to pay some part at least of the expenses. This is but just, when we consider the expense attending the transportations of two or three boats from a distance.

The races should be about Commencement time, when most if not all the members of every college whose boats enter could be present, probably to the number of one thousand or more. The families and friends of many would also be there, and the crowd from the vicinity would exceed that of any Fourth of July celebration. Thus the number of spectators would be very great, and of a better class than would attend upon any other occasion.

We fully endorse the following recommendation: Let the public therefore move in the affair, and let the press not be backward in aiding by its voice the accomplishment of so great a project as the College Regattas.

REGATTAS AND REGATTA RULES.

A Regatta, Dr. Johnson says, signifies a "race between two or more boats." Regattas are more popular now than they have been for a number of years past; in fact it may be safely asserted that at no time in the history of our country have they attracted so much of the public attention.

They are generally gotten up under the mangemen of a committee appointed by the authorities of the town or city where they are to take place, or under the supervision of a regatta club or association.

We give below the various rules which have governed regattas in this country, together with the general rules under which the English regattas are managed:—

ENGLISH RULES.

Rule 1.—Notice shall be given to the Secretary of the regatta, of any crew or club intending to compete for either of the prizes, with the names of its captain and secretary, and a list of those members from whom the rowing crew is to be selected.

Rule 2.—All objections and other matters for consideration shall be made and submitted in writing, and objections to any crew or club entered shall be made in writing to the secretary of the regatta; and the committee shall investigate the grounds of objection and decide thereon.

Rule 3.—The entrance money to be paid to the secretary of the regatta at the time of entering, by each crew or club proposing to contend for the respective prizes.

Rule 4.—The entrance money to be applied towards defraying any expenses incidental to the regatta.

Rule 5.—At the meeting of the committee on the evening preceding the regatta, the captain or secretary of each crew or club entered, shall deliver to the secretary of the regatta a list containing the names of the actual crew appointed to contend in the races; and no person will be considered eligible whose name is not also included in the list required by the first general rule.

Rule 6.—In the event of a dead heat taking place, the same crews, with the same boats, shall enter again, or the crew refusing shall be adjudged to have lost the race.

Rule 7.—No member of a club shall be allowed to be substituted for another who has already rowed in the contest; nor shall any member of a club be allowed to row with more than one crew in any of the races.

Rule 8.—All crews or clubs purposing to contend in the regatta, shall provide themselves with small colors or flags, to be carried in the bows of their boats.

Rule 9.—Marks out the course.

Rule 10.—Provides that if more boats are entered than can row with convenience to themselves they shall draw out by lot.

Rule 11.—If any boat while in her course is fouled by another, the latter shall be put out of the race. No boat is allowed to take the water of another unless she has a clear lead of a boat's length, in which case she may take any course she pleases, and that one becomes her's from that time.

Rule 12.—No fouling to be permitted, and in case any shall take place, either by accident or otherwise, the race shall be at an end as regards the boat fouling.

Rule 13.—Every boat shall be steered by a member of the club contending for the prize.

Rule 14.—An umpire and judge shall be chosen by the committee, and named on the morning of the race.

Rule 15.—The start shall be directed by the umpire, or any one he may appoint, who shall first ask "are you ready?" If answered in the affirmative, he shall then order or make a sign for the qoats to start.

Rule 16.—The umpire shall start the boats punctually at the time appointed; and any boat not present at the time named shall be considered as drawn; and if only one boat starts it shall be deemed the winner.

Rule 17.—If any boat starts before the umpire's signal is given, it shall be deemed a false start, and the boats shall return to their stations for a fresh one.

Another form of English Regatta Rules.

When a number of boats may have entered, or have started, three or more graduated prizes shall be given. Three boats to start, or no race, or the first prize only will be awarded.

The boat nearest the mark-buoy or flag-boat, when rounding the same, to be considered the leading boat, and the other boats must give way to her to prevent fouling.

Should a boat foul another during a match, the boat making the foul shall forfeit all claim to the prize.

Should a boat obtain the lead, the crew shall continue the course and not pull across the bows of another boat to impede its crew from passing them, when a chance may be afforded the next boat to do so. Every boat shall have a fair chance of passing another, and none shall be compelled to keep in the wake of another boat, when an opportunity is afforded of passing it.

When two or more boats are abreast, each shall allow sufficient room to the other, in order to prevent their oars from fouling.

All fouling to disqualify the party in the race. And any willful act shall preclude the aggressor from entering in any other race.

The coxswain of the boat shall be considered to be the representative of the crew. And all complaints shall be made through him.

COMMITTEE REGULATIONS.

As the object of Town Regattas is as much to benefit an industrious portion of the community, as it is to gratify the spectators, the committee prohibit drunkenness and immoral conduct, and will visit with their displeasure any parties guilty of the same.

A proviso is generally made, that in the event of the weather proving unfavorable, the match shall be postponed.

All boats and persons entered for a match shall be entirely under the direction of the Committee of Management, who shall award the prizes and settle all disputes; there shall be no appeal from its decision.

All disputes to be made to the committee immediately after the termination of the match; but any objection to the crews or boats must be made before the start is effected.

An entrance fee should be enforced on the entry of a boat which is to ensure a start; the amount to be returned to the party in the event of his participating in the match.

Boats to start from buoys laid down by the committee.

All boats should carry a distinguishing color eighteen inches above the gunwale.

A preparatory flag, denoting the match about to come off, shall be hoisted, and all boats or vessels entered for such match must immediately take up the stations assigned to them by the committee.

As soon as the signal is hauled down, and the gun fired, the start shall be effected.

No boat shall be allowed to compete for a prize unless the entrance money has been duly paid.

The arrival of the winning boat will be denoted by a salute of one gun.

EMPIRE CITY REGATTA CLUB RULES.

The choice of position shall be selected by drawing lots. The boat which draws number one shall be entitled to the first choice, but must take position in such a manner as to allow all the other contestants sufficient room in regular order, either to the right or left. Number two will take position next to number one, and so with the whole number.

The boats must draw up on a line in full view of the judges' boat, and must start on the second firing of the gun, the first firing being the announcement for the boats to take their position.

The boats will row to the southerly stake boat, which must be turned from the west towards the east, then row to the northerly stake boat, passing the judges' boat on the east side, turning from the east towards the west, then back to the starting point, saluting the judges' boat on the same side from which the start was made.

[This course is rowed twice round, making a distance of precisely five miles, with four turns; and it will be observed that the judges' boat is placed n the centre of the course, there being a stake boat above and below it.]

Any deviation from the rules on the part of one or more of the boats, will deprive the offending party of all the benefits of the race; and any boat which, in the opinion of the judges, shall wilfully or intentionally foul another, or come in collision when it can be avoided, the guilty party shall be ruled out of the race.

The decision of a majority of the judges shall in all cases be final, if such decision does not controvert these rules.

Should accidental fouling occur, the boats will get clear as best they can, without using any unfair means.

The following standing resolutions were also adopted by the club ;—

Resolved, That on the last meeting of the club, previous to the taking place of the regatta, the Club shall proceed to decide by lot the choice of position for each boat entered; and should any boats enter after said drawing, they shall take position in the order in which they enter.

Resolved, That all of the boats shall furnish themselves with a white flag, on which shall be conspicuously painted the number which they have drawn for choice of position. Said flag shall be as nearly as possible fourteen inches long by nine inches broad, and shall be carried at the extreme stern, on a staff two feet six inches above the gunwale.

Resolved, That if it be proven and made apparent that any boat purposely fouls another, or wilfully and intentionally interferes with her progress, said offending boat shall be deprived of all the benefits of the regatta, and the persons rowing her shall be considered and held in disgrace before this club.

These rules and regulations have been observed so far as they could be made applicable, in all the regattas which have been given by the club.

RULES GOVERNING THE UNION REGATTA OF COLLEGE BOAT CLUBS.

The race shall be between the undergraduates of the College, including the graduating class—(meaning by undergraduates the four classes of the Academical Department.)

Each College shall enter as many boats as they wish. Boats may carry coxswains or not, as they please.

The course shall be three statute miles in length; and two courses shall be previously surveyed—the one straight, the other a mile and a half and repeat —either to be rowed according to the day.

The positions of the boats shall be determined by lots.

An allowance of twelve seconds per oar shall be made in favor of smaller boats.

Any boat crossing another's bow so as to make her thereby alter her course, shall be disqualified to take the prize.

Each College entering shall appoint an umpire—these umpires shall choose a referee.

A set of silk colors, with a suitable inscription, shall be procured by a committee, to be presented to the winning boat, the expense thereof not exceeding twenty-five dollars, to be paid as an entrance fee by the boats entering the regatta.

BOSTON REGATTA RULES.

The race shall come off on the Charles River Course. Boats are to be designated by numbers carried on a white color, in the bow, which will be supplied from the judges' boat upon drawing for position, and each crew must be uniformly dressed. The various boats shall come to the judges' stand to draw for position, and a gun will be fired to come into line; a second gun to start.

The race will be round the mile and a half stake and return (three miles,) and no boat shall cross another's bows so as to impede the progress of the stern boat, and in rounding the upper stake, outside boats must give inside boats sufficient room to turn. In returning, boats must pass between the judges' boat and Braman's Baths. These rules and regulations must be subscribed to by the rowers and coxswains of each boat at the time of entering for the regatta. The ruling of the judges is to be fixed in all cases.

RULES OF THE SOUTH CAROLINA REGATTA CLUB.

It must take two or more boats, owned by different and unconnected persons, to make a race.

Boats must be entered with the stewards by sealed entries on or before the evening previous to the race for which they are to contend.

All boats which start for a race shall come up to the judges' stand, to be reported on by the stewards, and if any steersman or oarsman shall cross, jostle, strike, or use any foul play whatever, (the judges and stewards so adjudging,) such steersman or oarsman shall be prohibited from rowing or steering for any of the purses of this club; and the master, owner, or person employing such steersman or oarsman, shall not receive the purse should he win, but the same shall be given to the second boat in the race.

The judge shall give fifteen minutes' notice by a signal gun, before the hour of starting, and such boats as are ready shall not wait for those that are not.

The judges, together with the stewards, shall settle all disputes, and their decision shall be final.

The helmsman in each boat wust be white, and the crew either wholly white or colored.

The distance to be rowed shall be one mile.

The following shall be the classification of boats:—

First class.—Maximum length, fifty feet; maximum number of oars, twelve. Entrance fee, twenty dollars.

Second class.—Maximum length, forty-five feet;

maximum number of oars, ten. Entrance fee, fifteen dollars.

Third class.—Maximum length, forty feet; maximum number of oars, eight. Entrance fee, twelve dollars.

Fourth class.—Maximum length, thirty-five feet; maximum number of oars, six. Entrance fee, ten dollars.

PRIZES.

First class boats	$500
Second class boats	300
Third class boats	200
Fourth class boats	150

RULES GOVERNING THE NEWBURG REGATTAS.

First.—All boats must be regularly entered by letter or otherwise; the entrance money must be paid before starting.

Second.—The members of the different boats are requested to be present at the drawing of numbers, which will take place at two o'clock on the day of the regatta.

Third.—Each boat will be designated by the number they draw—say one, two, three, four, &c., which must be carried on the bow or some conspicuous place, where the number can be easily recognized. The distinguishing flags will be furnished by the Association.

Fourth.—All boats starting must keep in a straight line for the stake boat. Number one, two, three, &c., will be entitled to the inside track.

Fifth.—Any boat passing another must do so without touching the oars of the boat so passed, otherwise foul.

Sixth.—All boats coming in must report themselves to the judges.

THE UMPIRE.

The umpire must be in a boat or on the adjacent shore; and he either starts the boats by the word " off" or " go," or by the firing of a gun. It is usual for him before giving the word to ask the crews, " are you ready?" when, on receiving a distinct answer in the affirmative, the signal is given. The umpire then has the boats in charge till the conclusion of the race; and his duty is to see, in case of a foul, which is the offender, and to decide accordingly.

THE JUDGE.

The judge is stationed at the winning point, and is simply to name the winning boat; before doing so, however, he must be fully informed that the race was rowed in strict accordance with the rules.

When there is more than one judge it will require a majority of one opinion to decide upon the result of a race, and if a majority cannot be obtained, the umpire shall have the power to settle the point or points in dispute, and his decision shall be final.

DECISIONS UNDER THE RULES OF THE EMPIRE CITY REGATTA CLUB.

It being apparent in the regatta of 1855, that one of the boats did not strictly follow the printed rules, the judges made the following decision in the case:—

Mr. William Decker having passed the judges' boat on the side opposite to that which is designated in the rules of the Empire City Regatta Club he is in consequence not entitled to the prize which he claims to have won.

Signed by the judges,

J. SHERMAN BROWNELL,
CHARLES FOX,
D. S. PETTEE,
ABM. BARKER,
FRANCIS D. BIGELOW.

In the regatta given by the Empire City Regatta Club in 1856, the judges ruled Thomas Daw out of the race, although he came in ahead of his competitors, and awarded the prize to Stephen Roberts, on account of the former turning the stake boat in a contrary manner from that pointed out in the rules.

REGATTA CLUBS.

Regatta Clubs and Associations have been formed in the following places :—

Empire City Regatta Club, New York. Organized 1855.

Charles River Amateur Boat Club Association, Boston. Organized 1856.

College Regatta Association. Organized 1858.

Newburg Regatta Association, Newburg, N. Y. Organized 1856.

Chicago Regatta Association, Chicago, Ill. Organized 1857.

Charleston Regatta Association, Charleston, S. C. Organized 1850.

Florida Regatta Club, Jacksonville, Fla. Organized 1855.

REGATTAS GIVEN BY CITY AND TOWN CORPORATIONS.

The first regatta given by the authorities of Boston, took place on the 4th of July, 1854.

The first regatta given by the City Councils of Portland, Maine, was on July 4th, 1857.

The authorities of Hartford, Conn., New Bedford, Mass., Milwaukee, Wis., Yonkers, N. Y., Marblehead, Mass., Newburg, N. Y., and Portsmouth, N. H., have also given regattas.

The authorities of New York never gave a regatta, or ever officially sanctioned one.

Where Regattas have been Given.

Regattas have been given on the waters adjacent to the following places :—

- New York.
- Boston.
- Portland, Me.
- Chicago, Ill.
- Milwaukee, Wis.
- Masonboro', N. C.
- Lowell, Mass.
- Rocky Point, R. I.
- Madison, Wis.
- Yonkers, N. Y.
- Portsmouth, N. H.
- Newburyport, Mass.
- San Francisco, Cal.
- Albany, N. Y.
- Cincinnati, O.
- New Bedford, Mass.
- Hull, Mass,
- Philadelphia.
- New Haven.
- Charleston, S. C.
- Savannah, Ga.
- Jacksonville, Fla.
- Newburg, N. Y.
- Poughkeepsie, N. Y.
- Hartford, Conn.
- Brooklyn, N. Y.
- Marblehead, Mass.
- Sandusky City, O.
- Pittsburgh, Pa.
- Springfield, Mass.
- Jersey City, N. J.
- Newark, N. J.
- Mobile, Ala.
- Hudson, N. Y.

Southern Regattas.

The boat races in the cities of the Southern States are usually over a course of a single mile, between two lines drawn exactly that distance apart. The rowers are mostly slaves or free negroes. In Charleston, Savannah, and Jacksonville, Fla., regattas are annually given, and usually take place in the fall.

FORMATION OF BOAT CLUBS.

CONSTITUTION, BY-LAWS, RULES AND REGULATIONS.

We adopt the form of the Omacatl Club of the city of New York. The constitution, by-laws rules and regulations of this club are based upon the experience of years, and are probably as near perfection as human ingenuity can bring them.

CONSTITUTION.

Article I.

Section 1. This organization shall be known as the ——— Club.

Sec. 2. The number of its members shall not exceed ———.

Sec. 3. No person can be admitted under the age of ———.

Article II.

Sec. 1. Every candidate for admission must be submitted to the Investigating Committee, after having been proposed to the Club by one member, and seconded by another.

Sec. 2. The Investigating Committee shall report at the next meeting as to his qualifications, when the Club may proceed to ballot, two-thirds of the members being present; and if he receives the unanimous vote of the members, he shall be declared elected; but in any other event he shall be rejected.

Sec. 3. A person once rejected shall not be again proposed for membership until after the expiration of six months.

Sec. 4. A member elect who shall fail to appear for initiation at the next regular meeting succeeding his election, may forfeit his right to membership by a vote of a majority of the members present.

Article III.

Sec. 1. Honorary membership may be conferred, by the unanimous vote of the Club, upon such persons as shall have been active members —— years.

Sec. 2. Honorary members shall not be subject to dues or assessments, hold office, or be entitled to a vote.

Article IV.

On the admission of each new member the secretary shall forthwith notify the same to him, and furnish him with a copy of the constitution and by-laws, and request him to be present at the next regular meeting for initiation.

Article V.

The initiation fee shall be ——— dollars, payable to the treasurer, by the member elect, after having signed the constitution and by-laws.

Article VI.

The dues shall not exceed ——— dollars every four weeks, payable in advance.

Article VII.

Sec. 1. The officers shall consist of a President, Vice-President, Secretary, Treasurer, and Librarian, to be elected semi-annually—the election to be determined by a majority of the whole votes given.

Sec. 2. The officers elect shall take their seats at the next regular meeting.

Sec. 3. A vacancy may be filled the evening it occurs, provided two-thirds of the members are present.

Article VIII.

The President, immediately on assuming the duties of his office, shall appoint the following committees, viz: Investigating, Finance, and Repairs and Supplies, consisting of three members each, (who are not officers.)

Article IX.

Sec. 1. The President shall preside at all meetings of the Club, have the casting vote in all cases, appoint all committees, except otherwise directed by a vote of the Club, keep order during meetings, have a general supervision of all its affairs, and impartially enforce the constitution and by-laws.

Sec. 2. The Vice-President shall be required to aid the President in the discharge of his duties; and in his absence he shall officiate in his place, and strictly attend to all the duties of that office.

Sec. 3. The Secretary shall attend at each meeting of the Club, call the roll at the appointed time, keep minutes of the proceedings, read and file all communications and other papers, issue notices of meetings when directed by the President, conduct the correspondence, and fulfil all the duties of the office he assumes, under the penalty of one dollar for each neglect.

Sec. 4. The Treasurer shall collect and account for all dues, fines, and initiation funds; disburse all money of the Club, and furnish a full statement of its financial affairs at the expiration of his term of office. He must not dispose of any money or pay any bills, unless so ordered by the Club; and fulfil all the duties of the office he assumes, under the penalty of one dollar for each neglect.

Sec. 5. The Librarian shall have the supervision of the library, make a report as to the same at the expiration of his term of office, and fulfil all the duties of the office he assumes, under the penalty of one dollar for each neglect.

Article X.

Sec. 1. The Investigating Committee shall perform such duties as are laid down in Article II., second section of this constitution.

Sec. 2. The Finance Committee shall audit and inspect the books of the treasurer, and shall make a written report of the financial condition of the Club at the first meeting in every month.

Sec. 3. The Committee of Repairs and Supplies shall have a general supervision over the property of the Club, make all purchases, and superintend such repairs as shall be ordered by the Club.

Sec. 4. Any member accepting an appointment on any Committee, and failing to fulfil the requirements thereof, shall be fined not to exceed one dollar.

Article XI.

Any officer may be removed from office, or any member expelled from the Club, by a vote of two-thirds of the members present, at a special meeting called for that purpose, charges having been preferred in writing at least one week previous to such meeting.

Article XII.

The President shall call a special meeting at the written request of five members, or when, in his judgment, the interests of the Club require it. Every member shall be notified of a special meeting.

Article XIII.

No member shall be considered as having resigned from the Club until he shall have paid his arrearages, and given notice to the secretary in writing of his intended resignation.

Article XIV.

No game of hazard shall be introduced or played in the Club, nor shall any game be played for money, or any betting allowed. Any infraction of this rule shall subject the member to a fine of ——— dollars for the first offence, and expulsion for the second.

Article XV.

Sec. 1. The Trustees shall continue to hold office during their term of membership, unless removed, as provided for in Article XI. of the constitution. They shall hold the property of the Club in trust.

Sec. 2. In case of a vacancy caused by resignation or otherwise, it shall be filled by ballot.

BY-LAWS.

Sec. 1. The regular meeting of this Club shall be held on every alternate ——— evening, at eight o'clock, P. M., from March 20th to September 20th, and at half-past seven o'clock, P. M., from September 20th to March 20th.

Sec. 2. Seven members shall constitute a quorum for the transaction of business.

Sec. 3. Meetings of the Club shall be strictly private.

Sec. 4. The fines shall be, for absence at first roll-call twelve and a half cents, and for non-attendance one dollar.

Sec. 5. Any member permitting his dues or fines to remain unpaid longer than three months, shall incur an extra penalty of two dollars for the first month thereafter; and second month may be expelled.

Sec. 6. Any member for an infraction of the constitution, by-laws, or rules of order, not specially provided for, shall pay such fine as the Club may inflict.

Sec. 7. These by-laws shall not be altered, amended, or digressed from, unless a proposition to such effect shall have been made in writing at a regular meeting previous to such action being taken thereon, which shall be by a vote of two-thirds of the members present.

RULES OF ORDER.

Article I.

1.—Opening.

2.—Calling Roll.

3.—Reading Minutes of previous meeting.

4.—Collection of Fines and Dues.

5.—Reports of Standing Committees.

6.—Reports of Special Committees.

7.—Proposal for membership.

8.—Report of Investigating Committee.

9.—Balloting for Candidates.

10.—Initiation.

11.—Unfinished Business.

12.—Reading Bills, Communications and other Papers.

13.—New Business.

14.—Calling Roll.

15.—Adjournment.

Sec. 2. At meetings called for special business, that business shall take precedence.

Sec. 3. On election nights all business shall be dispensed with after the reading of the minutes with the exception of the report of the Investigating, Committee and the initiation of candidates, until after the election, when the business shall proceed in the regular order.

Article II.

Sec. 1. Every member speaking shall rise in his place and address the Chair.

Sec. 2. Should any member, while speaking, transgress any of the laws of the Club, or indulge in personalities, he may be called to order by the President, or by any member, through him, when he shall immediately cease speaking (unless permitted to explain) until the point of order is decided.

Sec. 3. Any member feeling aggrieved at the decision of the Chair, may appeal to the Club, if his appeal is seconded.

Sec. 4. No member when speaking shall be interrupted, except by a call to order, or an explanation from a member, who shall confine himself exclusively to his explanation.

Sec. 5. No motion shall be open for debate until stated by the Chair.

Sec. 6. No member shall speak twice on the same subject until others who wish to speak have spoken.

Article III.

The following questions shall not be debateable:—

A motion to adjourn.

A motion to lay on the table, when a privileged motion.

A motion for the previous question.

A motion to read a paper or document pending a question.

A motion to reconsider.

Article IV.

No question shall be stated unless properly moved and seconded, nor be open for consideration until stated by the Chair; and when a question is before the Club, no motion shall be in order except—1st, to lay on the table; 2d, the previous question; 3d, to postpone; 4th, to recommit; 5th, to refer; 6th, to amend; and they shall have precedence in the order in which they are arranged, the first two of which shall be decided without debate.

RULES AND REGULATIONS.

Boats.

First.—The boats shall not be loaned unless by the written consent of three-quarters of the members, under a penalty of five dollars for each offence.

Second.—The boats shall not be taken out or manned on the Sabbath, except to save life or property, under a penalty of five dollars for each of the crew, and ten dollars for the coxswain.

Third.—No member shall enter the boats except in slippers, or step upon their gunwales or thwarts, under a penalty of twenty-five cents for each offence.

Coxswain.

First.—Each member shall serve one week as coxswain, as their names stand on the roll. In the absence of the regular coxswain, the next in order may take his place.

Second.—On extra excursions of the Club, the members participating shall have power to elect their coxswain.

Third.—The coxswain shall have entire control of the boat and appurtenances from the time of leaving the house until they are returned to their proper places.

Coxswain's Orders.

First.—The coxswain shall give on going out the following orders :—

First.—Oars.

Second.—Across.

Third.—Out.

Fourth.—Give way.

On coming in :—

First.—Weigh.

Second.—Across.

Third.—Ship.

To stop in the river "weigh," then "across;" starting again "out," then "give way;" to back water "stern all."

To salute "weigh," "oars a-peak."

Second.—In case a stranger is coxswain, the orders shall be given by the stroke oarsman.

Third.—The coxswain shall have power to fine any member neglecting or refusing to obey his orders, the sum of twenty-five cents.

Stowing the Boats.

First.—The coxswain shall, immediately on his return to the house, station his men in different quarters, who shall see that everything in their direction is in its proper place; they shall not be allowed to leave without permission; failing in any of these directions they shall be fined one dollar.

Second.—The coxswain shall see that everything is in proper order before dismissing his men to dress.

Third.—The crew of each boat shall attend to the hoisting and stowing of their own boat, should both arrive at the same time.

MISCELLANEOUS.

THE CHAMPION RACE BETWEEN THE OARSMEN OF NEW YORK AND ST. JOHN, N. B.

Articles of Agreement of a Boat Race between Walter Welsh, of St. John, New Brunswick, on the one part, and Stephen Roberts, of New York, on the other part.

The aforesaid parties bind themselves, as men of honor, to conform to the following provisions :—

The proposed race to be in four oared boats, pulled by four men and four oars; no restriction as to coxswain. The boats shall be severally built in

New York and New Brunswick, and the oarsmen shall be residents of those places.

The said race shall take place on Charles river, Boston, on Saturday the 20th day of September, 1856, at three o'clock, or thereabouts, on the same course and distance rowed by the J. D. R. Putman and Neptune, on the 5th day of July, 1855, which was six miles. The amount of money to be rowed for shall be eight hundred dollars a side. Two hundred dollars to be paid on the signing of this contract by each party representing the said boats. Two hundred dollars more to be paid on the 4th day of July, on or before 12 o'clock, by each party, to the stakeholder, and the balance, four hundred dollars, to be paid by each party on the day before the race on or before 12 o'clock.

And it is further agreed, that the parties failing to fulfil any of the aforegoing conditions, do consent to forfeit the amount deposited by them.

The said Welch and Roberts appoint Robert McGill, of Boston, stakeholder. Thomas Cass and Cornelius Dougherty, for the St. John boat, and J. D. R. Putman and James Wentworth for the New York boat, to be judges. Either of the said judges being unable to act, the contracting parties shall have power to appoint another in his place. The said judges are empowered to select a referee.

And it is further agreed that the rules and regulations adopted by the city authorities of Boston on the 4th of July, 1855, be conformed to so far as rowing foul, or crossing each others' bows.

STEPHEN ROBERTS.
WALTER WELSH.

Witness:—W. W. Cooly.

The above race took place on the day specified, and was won by the St. John boat Neptune against the New York boat McKay.

Rowing Without a Coxswain.

A coxswain can no doubt be dispensed with to advantage, if a crew is properly trained to row without one. A great deal of practice, particularly in turning the stake boat, is necessary, however, before such an object can be fairly accomplished. Races have often been won through the ingenuity and superior judgment of an accomplished coxswain, but it must be borne in mind if a coxswain's services are required his weight must be carried. The weight of a coxswain is not entirely dead, however, because if he understands the duties of his office he can prevent a boat's rolling, and by forced elasticity can add to the speed of the boat when on the shoot, but not sufficiently by any means to offset the impediment which his weight in the boat produces.

The use of a coxswain in a race boat has become almost an obsolete idea in and around New York. The boat is now usually steered by the bow oarsman, who has a sub yoke placed near his stretcher. Attached to this yoke are copper wires running along the gunwale to the rudder yoke, and the bow is thus enabled to steer the boat with his feet.

ORIGIN OF ROWING WITHOUT A RUDDER.

The idea of rowing a boat in a race without a rudder, as is now often done, originated from an accident. The mooring line of a boat in Halifax, on starting for a race, got foul of the rudder and carried it away. The boat, notwithstanding, continued on her course and won the race, as the oarsmen contended, more easily than if the rudder had remained in its position.

KEEPING COURSES CLEAR.

It is of the greatest importance that the course should be kept clear of outside boats, as it has often been the case that a boat crossing the course has been the means, unintentionally perhaps, of causing a contestant to lose the race.

On Charles river the course is always kept clear by the Boston harbor police, which fact has no doubt been the means of drawing a greater number of races to those waters than would otherwise have been the case. Imaginary lines are drawn, and all boats are kept outside of the space included within these lines by the officers.

Considerable annoyance is experienced in rowing races in the vicinity of New York, by the great number of boats which are continually moving back and forth across the course laid out for the race.

ALLOWANCE OF TIME.

The rules of the Boston regatta, in 1855, allowed twenty seconds an oar to the four oared boats for every oar above that number which were used by their competitors. The distance rowed was six miles. This was not considered enough, and the rules of the boat club convention, recently held, have accordingly allowed twelve seconds on a course of three miles. It seems to be a question in the minds of many boatmen, as well as amateurs, whether even this is sufficient to offset the advantage which a superior number of oars has over a lesser number. The prevailing opinion seems to point to about five seconds an oar to the mile, which no doubt in most cases would render a four oared boat when rowing against a six or eight oar, as near equal as it is possible to get them.

SCULLS AGAINST OARS.

There is no doubt that two pairs of sculls will propel the same description of boat faster than two long oars, and in a race the boat pulling oars should claim about five seconds to the mile.

OUTRIGGERS AND OLD STYLE BOATS.

We have no record of any time having been allowed by outriggers to the old style barge built boats, although a match between them, without an allowance of time, would unquestionably be an unequal one.

The four oared boat Falcon, of Philadelphia, was rowed in the regatta of the Empire City Club in 1856, and, although manned by a noble crew, she was, soon after starting, the sixth boat in the race, and before two and a half miles had been accomplished she was one minute and twenty seconds behind the leading boat, and on the third mile she gave up the contest.

ENGLISH STYLE OF STARTING BOATS.

The style of starting boats in England is by placing the judges between the contestants, as it is contended that in that position they are enabled to direct their movements with much greater facility than is possible from a boat moored on one side.

MATCHES.

Matches are generally made subject to the standing rules of some regatta, but a private agreement should always be entered into, written and signed by the representatives of both parties, and each party should have a copy. The agreement should cover all points out of which any dispute might arise, and although it may be desirable to avoid the use of unnecessary words, it should, nevertheless, be as explicit as possible.

EXAMINING BOATS.

On examining boats for the detection of faults, the great point is to ascertain if they are stiff—that is, if they twist readily on being supported unequally; and when turned over with their bottoms upwards, that their keels are quite straight, and the two sides exactly alike. But few boats are mathematically so, and a correct eye will often detect, especially in the mahogany boats, some little deviation from the precise correspondence in the two halves, but unless very obvious it is of little consequence. A crooked keel is the result of a strain, and always interferes with a boat's way, requiring constant steerage, however slight against it, and thus also impeding the speed. Boats so curved are said to be "screwed" or hogged.

SUPPORTING BOATS.

Race boats or barges, when taken out of the water, should be either slung up by three or four straps or girths, according to the length of the boat, made wide enough to prevent them cutting into the wood when the weight of the boat is upon them. They should be placed about equal distance apart, commencing within eight or ten feet of the bow, and ending within about the same distance of the stern. When placed upon horses or stools, the bearings upon which they rest should be divided in the same manner. By the exercise of care in this respect boats are secured against being hogged or screwed. If but two straps or benches are used, they should be placed, one immediately under the forward thwart, and the other directly under the seat of the coxswain.

STEEL RUDDERS.

Steel rudders have been applied to two or three race boats, and by those who have used them they are highly recommended. They are made thin and flexible, so that when suddenly turned they will give to the force of the water without producing that sudden check or drawback to the speed of the boat which is often experienced with those of wood. In such case their lines assume a serpentine shape, and the water is thrown off gently, unattended with the usual rushing and boiling which accompanies the ordinary style of rudders when suddenly forced to either side. We believe they were first introduced by Mr. Roberts. For barges they would not be found as serviceable as those made of wood in the ordinary style.

WEIGHT OF CREWS.

ENGLISH.

The Exeter College crew in 1857, for an eight oared boat, weighed in the aggregate, not including the coxswain, 1,149 pounds, or an average of little over 143 1-2 pounds. The lightest man weighed 131 pounds, and the heaviest 158 pounds. The coxswain's weight was 123 pounds.

The aggregate weight of the Oxford crew, of eight, was 1,301 pounds, being an average of over 162 1-2 pounds for each man. The heaviest weighed 176, and the lightest 142 pounds. The coxswain weighed 138 pounds.

The Cambridge eight oared crew weighed in the aggregate 1,346 pounds, which was an average of 168 1-4 pounds for each man. The heaviest weighed 187, and the lightest 162 pounds. The coxswain's weight was 136 pounds.

In making up these crews the heaviest men were placed in the middle of the boat, and the lightest near and including the stroke and bow oars.

AMERICAN.

In the celebrated race between the six oared boats, Huron, of Harvard College, and Volant, of the Volant club, Boston, which took place on Charles river on the 23d of May, 1857, in which the former was beaten, being the first defeat the Huron club ever experienced, the weights of the crews were as follows :—

Volant.—Aggregate weight 862 pounds. Average weight 143 2-3 pounds. The heaviest man weighed 151, and the lightest 138 pounds.

Huron.—Aggregate weight 843 pounds. Average weight 140 1-2 pounds. Heaviest man 156 pounds and the lightest 125.

IMPROVEMENT IN RACE BOATS.

The recent improvements in four, six and eight oar race boats on the old style, is in lessening the width, adding to the length, and the appliance of outriggers.

A SHELL OR SKELETON BOAT.

A sculler's shell consists of two portions, the body, and the outriggers, which are on each side opposite each other. The boats vary in length from twenty to twenty-four feet, by about sixteen inches wide and twelve inches deep. When in the water with a sculler in her she does not draw over two to two and a half inches. These boats are constructed without a keel, and vary in weight from fifty to sixty-five pounds. They are covered entirely over with canvass, after which a hole is cut immediately over the thwart, through which the sculler enters his legs and takes his seat. Loose canvass is often sewed to the covering around the hole, which, after the sculler is seated, he brings up around his body and fastens with a strap, so that it is next to impossible for the boat to ship any water.

MAHOGANY BOATS ON THE ENGLISH PLAN.

The first mahogany boats built in this country were the Experiment and the McKay, both four oared, which were constructed for the Metropolitan Regatta Club, of Brooklyn. The latter is now owned by the Fashion Club of Pittsburg. There is also one in Toronto, Canada, and one or two in St. John, New

Brunswick. Besides these there are two mahogany scull boats, one belonging to the Union Club of Boston, and the other to the Metropolitan Club.

A number have since been constructed by the boat builders of New York, on what is considered improved models or plans, better adapted to the waters of this country.

DIMENSIONS AND MATERIAL OF A NINETEEN FEET WHITEHALL BOAT.

The following are the dimensions for a nineteen feet or Whitehall boat, adopted by the Empire City Regatta Club in 1855 :—

Length, nineteen feet ; width, four feet five inches ; depth, one foot seven inches. Timbers to be of oak eleven sixteenths of an inch thick, and placed eleven and a half inches apart. The upper streak to be of oak, half an inch thick ; gunwales also of oak one inch and three-eights in thickness. The boat to be provided with four thwarts one inch thick. Boat to be built smoothe work, without outriggers.

The Elizabeth Everson, which won the champion gold medal given by the Empire City Regatta Club at their first regatta, was built after the dimensions above given, as were also the four other boats which were entered against her.

A St. John, N. B., Race Boat.

Annexed is a description of the St. John, N. B., four oared boat Eclipse, the winner in the match race between New Brunswick and Nova Scotia oarsmen, which came off in the harbor of Halifax on the 10th of October, 1849.

She was built at Sand Cove, opposite St. John, in the early part of 1848, entirely of pine, thirty-four feet long, and fourteen inches deep. Her planks were three-eights of an inch in thickness, and she was fastened throughout with copper. She was put together like cabinet work, having everything neat, with nothing massive about her. With the crew in her she drew but three inches water.

The oars used on the occasion were four and a half inches in the blade, and having an average length of twelve feet. The distance rowed at that race was given as being about six miles, and the time forty-one minutes. There is evidently a mistake in this record, as no such time was ever made before or since, not even by six, eight or twelve oared boats. The time we will concede as being correct, but the distance, being given as "about six miles," we will claim the right to question.

USE OF LIGHT BOATS.

The use of very light boats by young oarsmen or beginners, is destructive to the acquisition of good style.

CHAMPION OARSMEN.

The champion oarsmen of the western continent must be acknowledged, at the present time to be those of the Union Club of St. John, New Brunswick. They have beaten the oarsmen of their own city, and those of New York, Boston and Halifax, in more than one contest against each.

CHAMPION OF THE THAMES.

Henry Kelly, of Fultham, England, was the champion of the Thames in 1857, he having beaten the previously acknowledged champion, James Messenger, in a scullers' match on the Thames river, at London, in May, 1857.

BLISTERS ON THE HANDS.

These troublesome little companions almost always occur on the hands from rowing. When they arrise they should be pricked with a fine needle, if this can be done before they have burst. The needle should be inserted obliquely, and the watery fluid contained in the blister should then be pressed out ; and this should be repeated as soon as the blister has filled the second or third time, or in other words, keep it clear of the fluid which accumulates in it. In this way the contact of the air is avoided and in two or three days the true skin becomes protected by a new corticle or scarf-skin. If, unfortunately, the blister should be broken, the best plan is to apply finely carded or medicated cotton in a thin layer under a kid glove, or finely powdered gum arabic, and keep the hands from water carefully, until the expiration of twenty-four hours. If possible, three days should elapse before the oar is again taken in hand, but if the oarsman cannot be spared he must keep on a kid glove.

LEARNING TO SWIM.

As it is very necessary that a rower should understand the art of swimming, we think it not out of place in this work to copy the simplest and easiest method of acquiring so desirable a knowledge.

A place should be selected where there is a long and shelving bank, and there the learner should attach a light cord to a stout post or tree, of such a length as to allow him to wade out to his full depth; he then turns round, having the cord fastened to his wrist, so that in any case he may be pulled or may pull himself ashore, if he gets in too great a depth. As soon as he faces the bank he may strike out boldly towards it, not caring how he gets there so that he does not touch the bottom with his feet or hands; but, whether under water or above, it matters little. Dr. Franklin advised the learner to endeavor to dive before learning to swim, so as to discover the difficulty which exists in getting under water. The young swimmer will generally manage at first to swim a dozen strokes; but by continuing to practice, he will gain confidence and skill, and soon find that the art of swimming is closely allied to Nature's gifts.

In making the strokes with the arms, as soon as it can be leisurely done, a rapid expiration and inspiration ought always to be made towards the end, while the head is well raised out of the water, and the mouth clear. If done before that moment considerable buoyancy is lost, because the chest ought to be maintained as full of air as possible during the stroke of the legs, for the sake of its greater lightness in that condition; and also during the early part of the stroke of the arms, because the chief fixed points for their muscles are the ribs and other walls of the chest, and if they are not fixed the muscles of the arms cannot act with their full power.

The inexperienced bather goes into the water cautiously and with exceeding care. But excess of timidity is dangerous in the water. Daring on the one hand and childish fear on the other, are alike to be avoided. Dr. Arnott, in his Elements of Physic, states the following reasons why, in ordinary accidents, so many persons are drowned who might easily be saved :—

First.—Their believing that the body is heavier than water; and therefore that continued exertion is necessary to keep them swimming. Now as a man cannot retain the swimming position without continued exertion, the body raised for a moment above the natural level, sinks as far below it when the exertion ceases; and the plunge, by appearing the commencement of a permanent sinking, terrifies the unpractised individual and renders him an easier victim to his fate.

Second.—From a fear that water by entering the ears may drown, as if entered by the nose or mouth, a wasteful exertion of strength is made to prevent it: the truth being, however, that it can only fill the outer ear, or, as far as the membrane of the drum, and is, therefore, of no consequence. Every diver and swimmer has his ears filled with water, and with impunity.

Third.—Persons unaccustomed to water and in danger of being drowned, generally attempt in their struggles to keep their hands above the surface, from feeling as if their hands were tied while held below; but this act is most hurtful.

Fourth.—Not knowing the importance of keeping the chest as full of air as possible, the doing of which has nearly the same effect as tying a bladder of air to the neck, and without other effort, will cause nearly the whole head to remain above water. If the chest be once emptied, while from the face being under water, the person cannot inhale again; the body remains specifically heavier than the water, and will sink.

LENGTH AND SPEED.

It seems to be conceded that there is a mean length for boats, which can only be exceeded at the expense of speed. What that precise length is has never yet been determined, but we will hazard the opinion that nothing is gained by giving a six oared boat over forty feet, and we think that thirty-five to thirty-seven feet should be the maximum length of a four oar. Take for example the race for six oared boats on Charles river, Boston, on the 19th of June,

1858. The course was three miles, and the following was the result :—

Boat.	*Length.*	*Time.*
Harvard....................	40 feet.	19:22
Fort Hill Boy.................	42 "	21:20
Robert Emmet...............	43 "	21:21
Shamrock....................	44 "	21:50
James Buchanan (fouled)	46 "	23:00

By the above it will be seen that the boat which was forty feet long was the winner, and that the others came in in the order in which they exceeded that length.

The same may be said of scull boats, for at the same regatta a scullers' race took place over a course two miles long, and the following is the order in which they returned to the starting point :—

Boat.	*Length.*	*Time.*
Black Bird....................	20 feet.	14:54
D. E. Poland...................	28 "	15:17
Boston........................	26 "	16:33
Eastern.......................	30 "	16:38

The above is worthy of consideration, to say the least of it.

LAUNCHING A BOAT—ORDERS.

In many of our well-formed clubs the strictest discipline is maintained, and every movement is made with military precision. A knowledge of the following orders may be useful to some of the newly formed clubs, and by way of parenthesis we will remark that the observance of discipline is one of the main features of a thoroughly organized boat club.

When the members enter their boat house, the crew which is to man the boat, after dressing themselves, stand up in a line and are thoroughly examined by the coxswain, to see that each man is in proper uniform. After satisfying himself that the crew are correctly dressed, he gives the following orders :—

Order first.—" Prepare to man the boat." The crew then divide equally, marching off with precision, and take their positions on each side of the boat.

Order second.—" Man." Each man then takes hold of the gunwales at the thwart knees.

Order third.—" Launch." At the giving of this word they step off simultaneously, carry the boat to the water, and launch it. After this is done the coxswain enters the boat and takes his position.

Order fourth.—"Number one in." The bow oarsman then gets in the boat and takes his seat. The same order is afterwards repeated for numbers two, three, four, and so on until the whole of the crew have taken their places.

Order fifth.—"Prepare to take oars." With this order, each man, without turning his body, lays hold of the handle and loom of his oar, which has been previously placed in the boat along the side so that the handle laps his thwart. After this is done the coxswain says "are you ready?" and immediately proceeds to give

Order sixth.—"Up." The oars are immediately raised to a perpendicular position, the crew still holding them in their hands.

Order seventh.—"Drop." The oars are then allowed to fall, the face of the blade striking the water, and they are adjusted in the rowlocks; sometimes, however, not before the coxswain gives the order to "ship."

Order eighth.—"Make ready." The crew bend forward, from the hips only, the handle well over the toes, and the blade of the oar thrown forward.

Order ninth.—"Give—way." The pull commences.

The first part of the orders, in regard to the launching of the boat, are of course only applicable where the houses are situated some distance inland from the shore. The boat is taken out of the water with the same precision and placed in its proper position in the house.

BOAT RACING IN COURT.

On the second of July, 1857, a case was decided in the Superior Court of Massachusetts, held in Boston, on the following merits: The case was an action brought by a depositor for the recovery of $300 from the stake holder in a boat race. Judge Nelson ruled that boat racing was not itself illegal, but that all wagers of any kind upon the same were so. Boat racing, he remarked, is a manly sport which deserves encouragement, and he doubted not that the jury entertained the same views, and felt proud that so many young men were engaged in it.

In regard to the rights of parties as to the money placed in the hands of a stake holder, the court ruled that the stake holder may legally pay it over to the winning party, even if the wager is illegal, and no one can recover the amount from him unless he had previous notice that he will be held responsible for the payment. Therefore, the question in this case was, whether or not such notice was given the defendant. The jury, after a brief absence, decided in the defendant's favor.

CLUB BOATS VS. WHALE BOATS.

A regatta was given in New Bedford, Mass., on the 4th of July, 1857, when the principal contest lay between a couple of four oared club boats and a fleet of whale boats to the number of fifteen. Some of the whale boats, in a separate race, started six minutes in advance of the main contest. The club boats were then started against their slippery antagonists, and six strokes were sufficient to get clear of them. They continued on their course, two and three quarter miles in length, and before the goal was reached they overhauled some of the boats which had been started, as above stated, six minutes before them.

INDIAN CANOE RACE.

In the regatta given by the city authorities of Portland, Maine, on the 4th of July, 1857, an Indian canoe or dug-out, race was one of the features of the day. Four canoes started with two Indians in each. The race was over a course of two miles, and the result was as follows :—

Louis and Peter Sockbasin, of the Penobscot tribe. Time 25:25.

Noel Francis and Louis Ketcham, of the Passamaquoddy tribe. Time 25:40.

Sapient and Jo. Sockalexis, of the Penobscot tribe. Time 26:00

A. Cloude and J. McCoy, of the Michmac tribe. Time 26:40.

MATERIAL AND LENGTH OF OARS.

Spruce is considered the most preferable wood from which to manufacture oars, being much lighter and, compared with ash, has a superior spring.

The usual length of oars is about fourteen feet, the stroke and bow varying a little from the middle ones. Sculls are usually made from nine to twelve feet long.

ROWING EXERCISE FOR LADIES.

There is no exercise more calculated to expand the chest, and give a healthful tone to the system generally, than that of rowing. Followed in moderation, it is an amusement which ladies, and particularly young ladies, would do well to patronize. It calls into healthy action the whole muscular system, without inducing that degree of fatigue which the same amount of exercise in any other way is apt to engender.

EMPEROR OF FRANCE AN OARSMAN.

We have no evidence that Louis Napoleon ever pulled an oar in a race, or was ever a contestant for a prize, but the court journals of Paris tell us that he spends a couple of hours every day at Fontainebleau in rowing, his physicians having recommended that form of taking exercise.

TIME MADE BY WINNING BOATS.

We commence our record of time with the year 1855, as previous to that date very little reliance could be placed on the distance which was given as having been rowed. In former times the course was generally put down as being "about" a certain number of miles, or was stated at what was acknowledged to be the distance by common consent; but we have no evidence of a course having been measured previous to that for the regatta on Charles river, on the 4th of July, 1854. At that time the authorities of Boston, by a resolution of the Common Council, directed the city surveyor to measure and stake out the course.

RECORD OF TIME.

Name of Boat.	*Place.*	*Date.*	*Oars.*	*Miles.*	*Time.*
		1855.			*M. S.*
J. D. R. Putman..........	Boston	July 4	4	6	51:06
Neptune, of St. John.....	Boston	July 5	4	6	47:35
Maid of Erin..............	Boston	July 18	8	6	43:43
Superior, of St. John.....	Boston	Sept. 13	8	6	44:00
Lady Putman.............	New York	Oct. 17	4	5	36:15

Name of Boat.	*Place.*	*Date.*	*Oars.*	*Miles.*	*Time.*
		1855.			*M S.*
J. D. R. Putman	Sandusky	Oct. 18	4	5	38:00
Flying Cloud	Lowell	Oct. 27	6	6	50:12
Volant	Boston	Oct. 27	6	6	50:06
Prima Donna	Charleston	Nov. 4	12	1	6:15
Annie Laurie	Charleston	Nov. 15	10	1	6:20
B. C. Guerard	Charleston	Nov. 15	8	1	6:35
Star	Jacksonville	Dec. 27	8	1	6:35
		1856.			
W. H. Tarboss	New York	June 23	4	5	34:54
Volant	Boston	June 23	6	3	22:33
Ariadne	Boston	June 23	4	3	23:22
Triton	Boston	July 4	4	3	21:51
Harvard	Boston	July 4	6	3	21:08
Virginia, of N. Y	Hartford	July 4	4	3	22:30
Robert Emmet	Boston	Aug. 21	6	6	63:00
Fremont	Newburyport	Aug. 26	4	3	25:24
Light Foot	Boston	Sept. 14	6	3	24:35
Neptune, of St. John } *	Boston	Sept. 20	4	6	42:00
James Mackay† }	Boston	Sept 20	4	6	43:08
Experiment, of N. Y.†	Rocky Point	Sept. 24	4	4	30:34
		1857.			
Veronica	Portland	July 4	4	2½	21:50
Fort Hill Boy	Portland	July 4	6	2½	20:15
Lady Putman	Chicago	July 4	4	4¼	31:06
Putman	Pittsburg	Sept. 19	4	3	21:35
Lexington	Lowell	Sept. 23	6	5	39:43
Robert H. Allaire	New York	Oct. 13	4	5	35:02
Lady Putman	Chicago	Oct. 17	4	4	30:17
Robert H. Allaire } match	New York	Oct. 29	4	5	35:15
Experiment † }	New York	Oct. 29	4	5	35:15¼
		1858.			
Harvard	Boston	June 19	6	3	19:22

*Great match for sixteen hundred dollars, between the St. John (New Brunswick) boat Neptune, and the New York mahogany boat James Mackay, on Charles river, Boston, in which the former won the race.

† Mahogany boats.

QUICKEST TIME.

Name of Boat.	*Miles.*	*Time.*
FOUR OARS.		
Neptune, of St. John, Boston, Sept. 20, 1856......	6	42:00
W. H. Tarboss, New York, June 23, 1856..........	5	34:54
Lady Putman, Chicago, Oct. 17, 1856.............	4	30:17
Putman. Pittsburg, Sept. 19, 1856................	3	21:35
SIX OARS.		
Volant, Boston, Oct. 27, 1855......................	6	50:00
Lexington. Lowell, Sept. 23, 1856.................	5	39:43
Harvard, Boston, June 19, 1858....................	3	19:22
EIGHT OARS.		
Maid of Erin, Boston, July 18, 1855	6	43:43
Star, Jacksonville, Fla., Dec. 27, 1855.............	1	6:35
TEN OARS.		
Annie Laurie, Charleston, Nov. 15, 1855...........	1	6:20
TWELVE OARS.		
Prima Donna, Charleston, Nov. 4, 1855............	1	6:15

SCULLERS' TIME.

We give only the time that has been accomplished over courses known to have been measured.

	Distance. Miles.	*Time. M. S.*
NINETEEN FEET WHITEHALL BOATS.		
Burns*—New York, Oct. 17, 1855.............	5	42:15
Fay—New York. Dec. 18, 1855................	5	45:00
TWENTY FEET SHELL BOAT.		
Daw—New York, June 23, 1856...............	5	43:00
DORY.		
Decker—Boston, July 4, 1855.................	3	31:04
SHELL BOAT.		
Daw—Boston, July 4. 1856....................	2	14:57
TWENTY FEET WHERRY.		
Black Bird, Boston, June 19..................	2	14:54

* The time given as having been made by Burns in a nineteen feet Whitehall boat is questioned, as such time has never been made even by a skeleton boat.

Besides the above, we find recorded the following time, but the exact description of boats used we are unable to give :—

	Distance. *Miles.*	*Time.* *M. S.*
Portland, July 4, 1857	2	21:10
Chicago, July 4, 1857	2	21:15

In this connection, we will give the singular result of a race which took place at Hartford on the 4th of July, 1856, between a boat with a single pair of sculls, one with two pairs, and one with three pairs. The distance rowed was three miles, which was performed in the following time :—

	M.	*S.*
Belle Creole, single pair sculls	24	15
Stella, two pairs	24	00
Irene, three pairs	27	15

PRICES OF CLUB AND RACE BOATS IN NEW YORK.

At the prices given below a proper idea can be formed of the cost of different boats, with fixtures complete, in New York :—

SIX OARED CLUB BOAT.

Length 40 feet, five dollars per foot	$200 00
Painting in colors (gold stripe extra)	20 00
Six Ash Oars, 14 feet each, 15c. per foot	12 60
Two Boat-hooks, each $1 50	3 00
Brass Rudder Yoke	2 50
Copper Stem and Scag Bands	2 50
Total	$240 60

FOUR OARED CLUB BOAT.

Length 35 feet, five dollars per foot	$175 00
Painting in colors	15 00
Four Ash Oars, 14 feet each, 15c. per foot	8 40
Two Boat-hooks, each $1 50	3 00
Brass Rudder Yoke	2 50
Copper Stem and Scag Bands	2 50
Total	$206 40

The above prices are for boats built in the best manner, of cedar or white pine, copper fastened and riveted; clincher work or lap streak; timbers of white oak, let in to fit the plank; keel edge or flat, as may be desired; tholes of locust, in gunwales; and after benches or stern sheets included.

The boats may have, in addition, fore-and-aft gratings, which are extras in boat building, the cost of which would depend upon the materials—black walnut, oak or mahogany—with the addition of the time of making them.

The rowlock may have a brass plate at a cost of 25 cents each rowlock.

A silver plated rudder yoke would cost three dollars.

Flags would depend on what kind was wanted—bunting or silk.

SIX OARED RACE BOAT.

Length 40 feet, at four dollars per foot, ...	$160 00
Painting in colors	15 00
Six Spruce Oars, 14 feet each, 20c. per foot	16 80
Two Boat-hooks, each $1 50	3 00
Total	$194 80

FOUR OARED RACE BOAT.

Length 35 feet, at four dollars per foot	$140 00
Four Spruce Oars, 14 feet each, 20c. per foot	11 20
Painting in colors	15 00
Two Boat-hooks, each $1 50	3 00
Total	$169 20

The above description of boats are built of cedar or white pine, with flat keel, lap streak, and copper fastened, and the rowlocks would be made of iron, placed on outriggers.

SHELL OR SKELETON BOATS.

TO ROW ONE PAIR OF SCULLS.

Length 17 feet, complete for use	$40 00
Length 20 feet, complete for use	$45 00

WHITEHALL OR WORKING BOAT.

Length 19 feet, with copper stem and scag bands, with one coat of paint	$70 00

PRICES OF OARS IN NEW YORK.

Spruce Oars, per foot	20 cents
Spruce Spoon Oars, per foot	20 cents
Ash Oars, per foot	15 cents
Spruce Sculls, per pair, either 8, 9, or 10 feet	$3 00
Ash Sculls, per pair, 7 or 8 feet	1 50
Ash Sculls, per pair, 9 feet	1 75

PRICES OF BOATS IN ENGLAND.

The following are the nearest approximation to the prices of boats in England that we can find :—

Eight oared race boat, with outriggers	$325 00
Four oared race boat, with outriggers	225 00
Scull boat, with outriggers	150 00
Six oared gig or barge	175 00
Four oared gig or barge	150 00

BOAT CLUB REGISTER.

Boat Clubs of Harvard College.

THEIR HISTORY AND ACHIEVEMENTS.

Boating, as an institution at Harvard College, in Cambridge, Mass., dates no further back than the fall of 1844. Previous to that time there are no traces of the existence of a boat club. During, however, the summer of 1843, regattas had been held at Chelsea, between boats pulled by mechanics, and it was perhaps the success which attended these races that suggested the idea of introducing rowing boats at Cambridge. In September, of 1844, a boat called the "Star," which had been built for the Chelsea races, was purchased by thirteen members of the class of '46, who had formed themselves into a boat club. This boat, probably the first club boat of the college, was about 36 feet in length, and pulled eight oars. Her former name was discarded, and that of

"Oneida" substituted. Bearing this latter name she was handed down from one college class to another, remaining in Harvard until about the year 1857, when she was sold to boat builders in Boston. Her namesake now glides upon the waters of Charles river, Boston.

The "Oneida" club had hardly got into good working order before a club also arose in the senior class of '45. This club bought the "Red Michael," a boat which had obtained some renown at the Chelsea races. Her name was changed to "Iris." She was 38 feet long, and pulled eight oars. The members of this club graduating the following summer, sold their boat to a Boston club.

In the spring of 1845 another boat, 36 feet in length, rowing eight oars and called the "Undine" was purchased by a club of the class of '48, and in the succeeding fall still another eight oared, called the "Huron," 40 feet in length, was added to the list of college boats. She belonged to a club of the class of '47.

The following spring (1846) the Oneida club sold their boat to the class of '49 and built a six oared gig, 36 feet long, which they named the "Atalanta."

Thus, a little more than a year from the organization of the first club, five boats had been owned in the college.

We now pass on to a period about three years later. In September, 1849, two of the before mentioned boats had disappeared, the "Huron" being sold at auction, in Boston, and the "Atalanta" sold to persons who sent her to Rio de Janeiro. But on the other hand two new ones had been added to the list, the "Halcyon," eight oars, and the "Ariel," six, both then belonging to clubs of the class of '51. The "Undine," eight, and the "Oneida," eight, were at this time owned respectively by clubs of the classes of '50 and '52. During the season of 1849–'50 much interest was exhibited in boating at Harvard, the above clubs being all well supported, and considerable rivalry existing between them.

The "Undine" club terminated its existence in July, 1850, with the class, and a few months after this the "Ariel" club was disbanded by order of the college government. The "Ariel" was subsequently sold to a club in East Cambridge. The "Halcyon" club continued until the next July (1851) when it disappeared with the graduating class, and the boat was sold to members of Yale College. From this time until the spring of 1854 the boating spirit was at an ebb; but one boat, the "Oneida," being owned in the college. About the commencement of the year 1854, the "Iris," a new 36 feet, eight oared boat, was built, which, however, in the spring of 1855 was sold to a club in the class of '57, and her name changed to "Huron." She still survives, bearing now, however, the name "Ariel."

The class of '56 then bought a new 40 feet, eight oared boat, christening her the "Iris;" she soon afterwards was the victress at Springfield. During the spring of 1855 also, the class of '55 having previously sold the old "Oneida" to a club of '58, obtained a four oared boat from St. John, which they called the "Y Y." This, however, as well as another which afterwards arrived, the "Thetis," owned in the class of '57, had but a short stay in college; the one perished through neglect, and the other disappeared.

About this time (spring of '55), also, the "Undine," four oared, was built by a club composed of members of the classes of '56 and '58. She is still owned by '58.

Soon after this came the contest with Yale College, at Springfield, the result of which gave the already increasing interest in aquatic sports a strong impulse. A number of boats, lighter and swifter than had formerly floated upon the bosom of Charles river, were soon added to the Harvard fleet, and that number has steadily increased.

In June, of 1856, a fast eight oared boat, fifty-one feet in length, was built for the college. She was paid for by voluntary contribution of the undergraduates, and christened the "Harvard." She won the second prize at the regatta in Boston, the following 4th of July.

In the fall of 1857 a new university boat was bought through the exertions of five college gentlemen, and the other subsequently sold to Columbia College, N. Y. The present "Harvard" is a light, six oared boat, forty feet in length. She is manned by a crew selected from the strongest oarsmen of all the clubs, and is the only champion or representative of the university. She won the Beacon cup of June 19th, 1858, making the fastest actual time ever accomplished on the Mill Dam course.

The following is a list of the boats at present owned in the college. The names of the clubs are uniform with the names of their boats :—

THE HARVARD.

Club first organized in June, 1856. Present boat, six oars; forty feet in length. As this is the university boat, and consists of but one crew, there are no officers of the club.

THE ORION.

Six oars; 35 1-2 feet long. Club organized in 1856. This club is chiefly composed of divinity and law students; there are, however, among its twenty members several members of the college faculty.

OFFICERS.

President.—C. W. Eliot.

Treasurer.—C. A. Cutter.

This boat has recently been sold to a club in the class of '61, consisting of 23 members, the officers of which are as follows :

President.—E. Crowninshield.

Treasurer.—G. H. Mumford.

Secretary.—J. Bigelow.

THE ONEIDA.

(Class of '58.)]

Eight oars; 46 1-2 feet in length. Built in June, 1856. Club organized in October, 1854. Twenty-two members.

OFFICERS.

President.—B. W. Crowninshield.

Secretary and Treasurer.—G. C. Tobey.

THE UNDINE.

(Class of '58.)

Four oars; 30 feet in length. Club organized and boat built in May, 1855. Fourteen members.

OFFICERS.

President.—W. H. Dunning.

Treasurer.—H. A. Richardson.

THE CAMILLA.

(Class of '58.)

Six oars; 42 feet long. Club of eighteen members, organized in May, 1856.

OFFICERS.

President.—W. H. Fox.

Treasurer.—G. W. Crosby.

Secretary.—B. G. Brown.

This boat has also been sold to a club in the class of '60, consisting of twelve members. The following are its officers:—

President.—S. D. Presbrey.
Treasurer.—E. Carter.
Secretary.—W. H. Adams.

THE IRIS.

(Class of '59.)

Six oars; 40 1-2 feet in length. This boat was built in June, 1856, and under the name of "Huron" was defeated by the "Volant" in 1857. Her present club, consisting of twenty members, was organized in 1856.

OFFICERS.

President.—J. H. Ellison.
Treasurer.—H. J. How.

THE LOTUS.

(Class of '59.)

Six oars; 44 feet in length. Club organized in April, 1856. Number of members, twenty-one.

OFFICERS.

President.—E. Curtis.
Secretary.—G. L. Chaney.
Treasurer.—E. L. Motte.

THE SABRINA.

(Class of '60.)

Eight oars; 50 feet long. This boat was built in 1855, and bearing the name of "Iris," won the victory at Springfield the same year. This club was organized in 1857. It numbers fifteen members.

OFFICERS.

President.—C. Crowninshield.

Treasurer.—R. G. Shaw.

THE BONETTA.

(Class of '60.)

Six oars; 42 feet in length. The club was organized in May, 1857. It now counts eighteen members.

OFFICERS.

President.—E. Wetmore.

Secretary and Treasurer.—G. G. Wheelock.

THE AVON.

Six oars; 41 feet long. Owned by four members of the class of '60.

THE JUNIATA.

(Class of '61.)

Six oars; 43 feet in length. This club, consisting of twenty-one members, was organized in October, 1857.

OFFICERS.

President.—J. H. Wales.

Treasurer.—S. F. Emmons.

Secretary.—C. Storrow.

Besides the above mentioned club boats there are various pair-oars and wherries owned by individuals connected with the university.

The college boats have been engaged in several races with varied success, as appears from the following statement, which includes all their public contests.

In 1846 the "Huron," an eight oared boat, pulled six oars against a four oared boat from Boston, called the "Wave," and was victorious. The race took place at Cambridge. The course was about two miles. Time not taken.

August 3, 1852, at a regatta rowed between Harvard and Yale Colleges on Lake Winnepiseogee, the following boats were entered:—

From Yale	Shawmut	8 oars
From Yale	Undine	8 oars
From Harvard	Oneida	8 oars

The last mentioned took the laurels, coming in about four lengths ahead of the "Shawmut." The distance pulled was between two and three miles. The time was not taken.

A second contest between these colleges held July 21, 1855, resulted as follows:—

Boats.	*No. of Oars.*	*Where from.*	*Actual Time.*
Iris	8	Harvard	22:00
Y Y	4	Harvard	22:47
Nereid	6	Yale	24:00
Nautilus	6	Yale	25:00

Distance 1 1-2 miles and return. Allowance of 11 seconds per oar for extra oars.

At the regatta held in Boston, July 4, 1856, of a number of boats which entered for the six and eight oared race, the two following came off winners with this result:—

Name of Boat.	*No. of Oars.*	*Where from.*	*Actual Time.*
Harvard	8	Harvard College	21:08
Robert Emmett	6	East Boston	21:23

The distance was 1 1-2 miles and repeat. An allowance of 20 seconds for each extra oar being given, the "Emmett" took the first prize and the "Harvard" the second.

On the 16th of May, 1857, a race of a mile and a half and return was rowed between the "Volant," of Boston, and the "Huron," of the class of '57, of Harvard College. The result was as follows :—

Volant	6 oars	21m. 00s.
Huron	6 oars	21m. 38s.

At the race for the Beacon cup, June 13, 1857, the following boats entered, with the annexed result. The distance was as usual 1 1-2 miles and repeat:—

Boat.	*Oars.*	*Where from.*	*Time.*
Harvard	8	Harvard College	20:20 1-2
Union	6	Boston	20:21
Urania	6	Boston	22:00
Camilla	6	Harvard College	22:17
Bonetta	6	Harvard College	22:24

An allowance of fifteen seconds per extra oar having been made, the "Union" was the winning boat. The "Oneida" had also entered for this race and had made very satisfactory time, but owing to the sickness of one of the trained crew she was obliged to withdraw upon the day of the race.

The Beacon Cup for June 19, 1858 was contested for by seven boats, all six oars. The race was 1 1-2 miles and return, and resulted thus:—

Boat.	*Where from.*	*Time.*
Harvard	Harvard College.	19:22
Fort Hill Boy	Boston	21:20
Robert Emmett	East Boston	21:21
Shamrock	Boston	21:50
Stirling	Boston	22:05
Bunker Hill	Charlestown	23:00

OTHER CLUBS.

ATALANTA CLUB,

Boston.

Boat house at Braman's Baths, on Charles river.

OFFICERS.

President.—Fernando Aviler.

Secretary.—H. Sullivan.

Number of boats.—One; a four oar.

Number of members.—Six.

This is the youngest club on Charles river.

ATALANTA CLUB,

New York.

ATALANTA CLUB,

Philadelphia.

BACHELORS' BARGE CLUB,

Philadelphia.

COLUMBIA COLLEGE CLUB,

New York.

Organized 1858.

Boat house.—Ninety-eighth street, East River, on Second avenue.

Number of boats.—One.

Number of members.—Twenty.

This club has the St. John built eight oared boat "Harvard," formerly belonging to Harvard College. She is fifty-one feet long, and has eight rowlocks on each side, opposite each other like those on a sculler's boat—so placed as to allow the crew to change sides without leaving their seats.

CENTRAL CLUB,

Boston.

OFFICERS.

President.—John Kelly.

Vice-President.—Eugene O'Neill.

Secretary.—Charles J. McCarthy.

Number of boats.—One; six oar.

This club owns the celebrated six oared boat

"Fort Hill Boy," which took the first prize in the Portland regatta in 1857.

CHICAGO CLUB,

Chicago, Ill.

DETROIT CLUB,

Detroit, Mich.

EXILE CLUB,

Somerville, Mass.

Number of boats.—One; six oar.

ECLIPSE CLUB,

Pittsburg, Pa.

FASHION CLUB,

Pittsburg, Pa.

Organized Sept. 25, 1857.

OFFICERS.

President.—Benjamin Minnis.
Vice-President.—R. L. Allen.
Treasurer.—H. Murphy.
Secretary.—C. H. Israel.
Recording Secretary.—William Evans.

Coxswain.— A. D. Reno.

Number of boats.—One ; four oar.

Number of members.—Thirty-one.

This is the club which owns the four oared mahogany boat McKay. Since her advent into Pittsburg she has been materially altered, to suit the waters in that vicinity, and her name has been changed to "Daniel Holmes." The club has built a new boat house on the Monongahela river, and in every respect has a most promising position.

GARDEN CITY CLUB,

Chicago.

HIAWATHA CLUB,

Albany, N. Y.

Organized May, 1857.

OFFICERS.

Commodore.—James H. Gross.

Assistant.—Wm. H. Burton.

Purser.—F. F. Grant.

Secretary.—C. T. Jenkins.

Number of boats.—One ; six oar.

Number of members.—Fourteen.

The boat house is situated in East Albany.

ION CLUB,

Boston.

Boat house at Braman's Baths, on Charles river.

OFFICERS.

President.—Mr. Dabney.

Number of boats.—Two; viz: one eight oared barge, and one six oared race boat. Besides these there are a number of wherries belonging to the individual members of the club.

Number of members.—Twenty-five.

This club is composed mostly of professional men, who graduated at Harvard College, and men of leisure. They are generally between the ages of twenty-five and forty years.

IVANHOE CLUB,

Cleveland, Ohio.

JAMES BUCHANAN CLUB,

Cambridge, Mass.

Number of boats.—One; six oar.

KEY-STONE BARGE CLUB,

Philadelphia.

MINNEHAHA CLUB,

Trinity College, Hartford.

Organized 1856.

OFFICERS.

Captain.—G. A. Steadman, Jr.

First Lieut.—John Bakewell.

Second Lieut.—T. B. Sexton.

Secretary and Purser.—H. O. Graham.

Coxswain.—W. G. Davis.

Coxswain's Mate.—F. M. Hawley.

Number of boats.—Two; one six oared barge, and one four oared race boat.

Number of members.—Twenty.

The uniform of this club, is white shirt, with blue bosom, collar and cuffs. The word "Trinity" is worked in white over a white "M" on the bosom, with white anchors in the corners of the bosom, cuffs and collars; white pants fastened around the waist by a black belt, upon which are the letters "Minnehaha;" straw hat.

METROPOLITAN CLUB,

Chicago.

Organized 1856.

Number of boats.—Three; viz: one six oar, one four oar, and one for two pairs of sculls.

This club owns the celebrated four oared boat Lady Putman, which has probably been the victor in more races than any other boat ever constructed. She won the first prize in the New York city regatta, in 1855, beating four other boats, and she has since won four races on the lakes, in some of which she beat six and eight oars without the usual allowance of time. She now stands the champion of our inland seas.

METROPOLITAN CLUB,

Brooklyn, N. Y.

Organized 1856.

OFFICERS.

President.—Charles Wetherell.

Number of boats.—Three; one eight oared barge, one mahogany boat on English plan, four oars, and one scullers's boat, mahogany, on English plan.

MILWAUKEE CLUB.

Milwaukee, Wis.

Organized 1856.

Number of boats.—Two; viz: one six oar, and one four oar.

MECHANICS' CLUB,

Sandusky, Ohio.

MAZEPPA CLUB,

Sandusky, Ohio.

MALTA CLUB,

New York.

NAIAD CLUB,

Yale College, New Haven.

Organized March 28, 1858.

OFFICERS.

Captain.—T. C. Bacon.

First Lieut.—W. R. Bacon.

Second Lieut.—F. J. Peck.

Number of members.—Six.

Number of boats.—One ; four oar.

The boat belonging to this club has been so constructed as to go with or without a coxswain. There are three boats belonging to the Collegiate and Commercial Institute Navy of Yale College.

OMACATL CLUB,

New York.

Organized December 9, 1853.

OFFICERS.

President.—Edward M. Banks.

Vice-President.—Robert Forrest.

Secretary.—Robert A. Johnson.

Treasurer.—Chas. C. Commerford.

Librarian.—M. V. B. Smith.

Number of boats.—Three; viz: the Omacatl, eight oared barge; Wave, six oared boat, seventeen years old; George Washington; four oared boat.

Number of members.—Twenty-five.

The rooms of this Club are at No. 811 Broadway, and their boat house is at the foot of Christopher street, North river. Their regular excursion evenings are Tuesdays, Thursdays, and Saturdays.

The boat house of this club is as convenient as possible, and is a model of beauty and neatness. The uniform of the club consists of a striped silk undershirt, white flannel shirt over it, with blue cuffs and collars, and blue pants, straw hat, with flat rim and broad ribbon, on which is neatly wrought the letter "O," with boat hook and oars crossed, forming a very pretty and appropriate device. They also wear on the breast a very neat decoration, consisting of a gold letter "O," with chased surface and pendant gold anchor. The winter months are spent at their rooms in Broadway, where the members of the club enjoy the facilities of a well furnished reading room and library.

OLYMPIA CLUB,

Boston.

PIONEER CLUB.

Albany.

Organized 1857.

OFFICERS.

President.—John E. McElroy.

Secretary.—Chester Hyatt.

Purser.—Richard Annesley.

Coxswain.—Wm. Headlam, Jr.

Assistant Coxswain.—Frank A. Gregory.

Legman.—R. V. De Witt, Jr.

Number of members.—Twenty.

Number of boats.—One; six oar.

ROVER CLUB,

Sandusky, Ohio.

Organized 1855.

OFFICERS.

Chairman.—R. R. Sloane.

Secretary.—Geo. J. Anderson.

Coxswain.—J. W. Cooke.

Number of members.—Ten.

Number of boats.—One; viz: four oared boat.

The boat belonging to this club was originally called the J. D. R. Putman, and was rowed in the Boston regatta on the 4th of July, 1855, where she took the first prize.

ROBERT EMMETT CLUB,

Boston.

OFFICERS.

President.—Mr. Monahan.

Vice-President.—Thomas J. Lavery.

Number of boats.—Two; both six oars.

Number of members.—Fifty.

RIPPLE CLUB,

New Bedford, Mass.

ROVER CLUB,

Boston.

STERLING CLUB,

Boston.

OFFICERS.

President.—Edward O'Brien.

Vice-President.—N. Sullivan.

Number of boats.—Two; a six oar and a four oar.

Number of members.—One Hundred.

TRITON CLUB,

Boston.

UNION CLUB,

Boston.

Organized May 26, 1851.

Boat house at Braman's baths, on Charles river.

OFFICERS.

President.—Daniel W. Rogers.

Coxswain.—Alfred Whiteman, Jr.

Assistant Coxswain.—Amos Webster, Jr.

Secretary.—Charles E. Wyett.

Number of boats.—Five; viz: one six oared boat, one four oared boat, one two oared boat, and two scullers' shells, one of which, of English build is tweaty-nine feet long and weighs but thirty pounds.

Number of members.—Twenty-five.

The Union Club is the oldest in Boston. During the early years of its existence nothing was attempted in the way of racing. The elements of future success were at work, however, and in May, 1853, the club purchased a four oar, the Wave, a boat better adapted for speed than the one they at that time possessed.

In the autumn of 1853, the club procured another four oar, the Ripple. This boat was constructed without a rudder; and to the Union Boat Club belongs the honor of first introducing on Charles river the style of rowing without the above named appendage—the coxswain pulling the bow oar.

A regatta having been announced to take place at Hull, Mass., in September, 1853, the club resolved to compete for the honors. The trial resulted in a complete victory of the Ripple, over a seven mile course.

On the 4th of July, 1854, the city of Boston gave their first regatta; and through the instrumentality of this club the authorities were induced to offer a prize for a wherry race. This club introduced at that time the first fast wherry, the Topsy, which was rowed by their coxswain at that time the late W. D. W. Allan, who took the first prize.

In the fall of 1855, the club took quite an active part in the formation of the Charles River Amateur Boat Club Association; but owing to circumstances beyond their control, they were unable to contend at the Association regattas with that success which had attended them in previous years. They bore their reverses, however, with becoming grace, and resolved to leave nothing undone in the way of regaining their lost laurels. Accordingly, in the year 1856, (soon after the annual regatta, at which the first prize for wherry pulling was awarded to the boat Fancy, rowed by their coxswain, Alfred Whitman, Jr.,) they purchased a new six oar; but were disappointed in soon finding that they were the only club that remained in the above fraternity.

In June, 1857, the club contended with their six oar, the Union, in the race for the Beacon cup, and won the most elegant prize that has ever been offered on Charles river. On the 4th of July, in the same year, by invitation of the city authorities of New Bedford, the club participated in the regatta at that place, pulled their four oar, the Ariadne, and again took the first prize.

Since the date of the organization of the club they have owned no less than twenty boats of different styles and dimensions.

A prominent feature in the history of this club is the many excursions that they have at different times originated; and there is scarcely a piece of water within a circumference of twenty miles of Boston, whose surface has not been ruffled by the dip of a Union oar.

The club is now in excellent standing, numbering some twenty-five members, active and honorary, and bids fair to exist a quarter of a century longer.

UNDINE CLUB,

Pittsburg, Pa.

Organized May 1856.

OFFICERS.

President.—Alexander Nimick.

Secretary.—E. R. Darlington.

Number of members.—Twenty-four.

Number of boats.—Two; viz: one eight oared barge built boat, and one four oared race boat.

The Undine Club is the oldest in Pittsburg, and its members are entitled to credit for the part they have taken in reviving the spirit and love for aquatic sports west of the Alleganies.

UNIVERSITY BOAT CLUB,

Brown University, Providence, R. I.

Organized June 4, 1857.

OFFICERS.

Captain.—Thomas F. Tobey.

Clerk.—William W. Keen, Jr.

Purser.—Charles M. Smith.

Number of boats.—One; viz: the Atalanta, six oars, outrigger, forty-four feet long.

Number of members.—Sixteen.

VOLANT CLUB,

Boston.

WASHINGTON CLUB,

Boston.

OFFICERS.

President.—Ed. Hooten.

Vice President.—Michael Hooten.

Number of boats.—Two; one six oar and one four oar.

Number of members.—Twenty-four.

LEXICON OF TERMS.

A

APRON—Attached to the stern inside the boat, to which the middle and upper streaks are nailed.

ATHWART—Across.

B

BINDING-STREAK—The first plank put on a smooth work boat.

BLADE—Flat part of the oar, or the portion which is dipped into the water.

BOAT-HOOK—An iron hook with a point on the back, fixed to a long pole, to pull or push a boat.

BOATING—The act or practice of sailing in a boat.

BOATABLE—Navigable for boats.

BOAT-ROPE—Painter, a rope to fasten a boat.

BOW-OAR—The oar nearest the bow of the boat.

BREAST-HOOK—A knee fitted in at the bow, and secured to the gunwales and stern.

By-the-head—When the bow is lower in the water than the stern.

By-the-stern—When the stern draws more water in proportion than the bow, or is not true on the water line.

C

Canoe—A boat formed of the body or trunk of a tree, excavated by cutting or burning. The Indians also make light canoes from small branches of trees and dry birch bark.

Coxswain—The one who steers the boat.

Crab—When the water catches the oar and turns its blade, so that the rower cannot extricate it without much difficulty, it is called "catching a crab."

Crew—All belonging to the boat.

Crank—Easily overset, or thrown on one side.

Clincher-work—When the lower edge of every plank overlays the next below it, like slates on the roof of a house.

D

Dash—The rower using the utmost of his power to propel the boat.

Dead-wood—Pieces put in where the keel and stem and stern post are united.

DIP—The blade of the oar in the water.

DUG-OUT—Canoe.

DORY—A light flat bottom row boat, with both ends raised, having nearly the form of a skiff.

E

EASY-ALL—Easing, or ceasing to row.

EASING—To cease rowing.

F

FISHING—Laying the ends of two pieces of timber together and fastening a third piece to both.

FEATHERING—Turning the blade of the oar from a perpendicular to a horizontal position.

FLOOR—The water-line model of a boat.

FOUL—To run against.

FOOT-BOARDS—Flooring; loose boards placed inside the boat, running fore-and-aft, resting on the floor timbers between the footlings.

FOOTLINGS—Fastened to the floor timbers on each side of the foot boards.

FORE-AND-AFT—Lengthwise the boat.

FORE-AND-AFT STRETCHERS—Pieces running fore-and-aft at the top of the foot-boards, acting as stretcher-braces.

Futtocks—The ribs or timbers to which the planks are fastened.

G

Garboard-streak—Fastened to the floor timbers, and to the stem and stern-post, at the keel.

Give-way—Commencing to row.

Gunwale—The inside strip fastened to the top streak

H

Hogged—Curved; the ends being lower than the middle.

K

Keel—The principal timber in a boat, extending from stem to stern at the bottom, and supporting the whole frame.

Keelson—A piece of timber on the floor timbers over the keel.

Keelson-board—Temporary or moveable floor, resting on the floor timbers.

L

Larboard—Left side of the boat.

Launch—The act of putting a boat in the water.

Limber-holes—Small holes cut on the under side of the timbers, to allow water to pass from the extreme ends of the boat into the well-hole.

Lower-streak—Next above the shutter-streak.

Loom—That part of the oar between the row-lock and the handle.

O

Oars-a-peak—Standing the oars up with the handles resting on the floor of the boat.

Oarsman—A rower, or one who impels a boat by means of oars.

Outrigger—Rowlocks standing upon a frame outboard from the gunwale.

P

Painter—A rope at the bow of a boat used to fasten it.

Port—Left or larboard side of a boat.

Pulling—Rowing.

R

Regatta—A race between two or more boats.

Rudder—The instrument by which a boat is steered.

RISINGS—A piece of plank fastened to the ribs inside, upon which the thwarts rest.

ROWING—The act of impelling a boat by oars.

ROWLOCK—That part on which the oar rests in rowing.

ROWER—Oarsman, or one who rows a boat.

S

SCULL—A short oar; when two short oars are used by a rower, one on either side of the boat, they are called sculls.

SCULLING—Rowing with two sculls.

SCARF—To unite two pieces of timber at the ends, by letting the end of one into the end of the other and bolting them together.

SCAG—The after part of the keel.

SCAG-BAND—A strip of metal, protecting the scag.

SCREWED—When the keel is crooked or curved.

SHEER—The longitudinal curve or bend of the top of a boat.

STEM-BAND—A metal band placed on the stem of the boat, from the top, and reaching to the keel, forming the cutwater.

STEM—A circular piece of timber to which the two sides of the boat are united at the fore end, Stern-all—Back all; to back water with the oars.

Stern-way—The movement of a boat backward.

Stern-post—The piece of timber erected on the extremity of the keel to support the rudder, and terminates the boat behind.

Sternmost—Furthest in the rear.

Stern-chase—When a boat astern is trying to overhaul one in advance, the endeavor is called a stern-chase.

Stern-fast—A rope used to confine the stern of a boat.

Ship—Placing the oars in the rowlocks.

Shoot—When the oars are in the water and the power of the rowers is applied, the boat receives an impetus which is called the shoot.

Shutter-streak—Between the broad and lower streaks.

Starboard—Right side of a boat.

Stake-boat—A boat moored at the end of the course, opposite the starting point.

Stiff—Not easily careened, or thrown to one side.

Stowing—Re-placing articles in their proper position.

Skiff—A light, flat bottom row boat, generally without a keel and raised at both ends. The bottom of a skiff would form nearly one-sixth of a circle. They are built in various styles in different localities.

STREAKS—Planks; they form the outside, and on a smooth-work boat are placed in the following order, commencing at the keel :—First, garboard streak; second, broad streak; third, shutter streak; fourth, lower streak; fifth, binding streak; sixth, upper streak.

STRETCHER—A moveable piece of timber, fixed across the floor of the boat for the feet of the oarsman.

STROKE—The sweep of an oar in rowing.

STROKE-OAR—The sternmost oar.

STROKESMAN—The man who rows the aftermost oar.

STERN-SHEETS—That part of the boat which is between the aftermost seat of the rowers and the stern, usually in a barge or working boat, furnished with seats.

SWIVELS—Metal rowlocks, working on a pin inserted in the gunwales.

T

THWART—The seat or bench of a boat on which the rower sits; the seat being placed athwart the boat.

THOLE—A pin inserted in the gunwale of a boat to keep the oars in the rowlock when used in rowing.

TAUT—(Webster spells it taught)—Tight, not slack.

THWART-KNEES—By which the thwarts are fastened to the sides of the boat.

THOLE-STEPS—A piece of hard wood fastened to the under part of the gunwale on the inside, pierced for the insertion of the bottom of the thole.

TOP-STREAK—Upper streak; the plank above the binding-streak.

TRANSOM-KNEES—Securing the gunwale and upper stretch to the stem.

U

UNSHIP—Throwing the oars out of the rowlocks.

UPPER-STREAK—Top streak.

W

WATER-LINE—A horizontal line supposed to be drawn about a boat's bottom, at the surface of the water.

WELL-HOLE—A hole in the bottom of the boat to let out the water.

WHITEHALL BOAT—See description.

Wherry—A shallow, light boat, built sharp at both ends, for fast rowing.—*Webster.*

Wale-streak—Gunwale.

Wash-streak—The streak above the gunwale in which the rowlocks are cut.

Y

Yoke—A piece of wood or metal at right angles to the head of a boat's rudder, from the ends of which are lines by which the boat is steered.

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FISH & MORTON,

BOAT AND YACHT

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An assortment of all kinds of

ROW BOATS, SAIL BOATS, AND YACHTS

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BUILT TO ORDER.

Builders of the fastest Sail Boats in the United States.

Orders received at the

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And at their Factory, on York Bay, four miles from Jersey City. Stages leave for the factory every hour, from Jersey City ferry.

Builders of yachts "Ultra," "Katy Did," "Washington," "Luckey," and sail boats "Bob Fish," "Fulton," "Smoothing Iron," "Wide-a-Wake," &c., and club boats "Witch of the Wave," "Advance," "Rescue," "Sudden Death," &c., &c.

W. H. & J. S. DARLING,

CLUB AND RACE BOAT BUILDERS,

NO. 368 SOUTH STREET, NEW YORK.

Among the various Boats built by Mr. William H. Darling, who of late has received his brother into partnership, and which business is now carried on by the Messrs. W. H. & J. S. Darling, No. 368 South street, New York, are the following :—

The "Lotus," a four oared race boat, was built for Yale College, Connecticut, in the year 1852, and is famous for her fast running, having won many races.

Another was the "Transit," which was also built for Yale College, and has proved to be an excellent six oared race boat, winning almost every thing she was ever entered to run for.

The "Virginia," of Brooklyn, was also built by Mr. Darling; was rowed on the 4th of July, 1857, at Hartford, Connecticut, and took the first prize—the silver pitcher. The "Virginia," of Brooklyn, is a four oared race boat, built in the year 1855, and has won many races.

The "Rowena," four oars, was built also for Yale College, in the year 1854, which was entered to run at the Yale Regatta, on the same occasion as the "Transit."

The "A. Boscus," four oars, was built in the year 1851, and is at present the champion of Lake Erie.

The "Whitehall," four oars, is also a fine and promising race boat.

The next which we call to notice is the "Putman," which gives her builders great credit, having invariably won every race she has as yet been entered for, and is noted for having made the quickest time over a three mile course on record.

The Messrs. Darling have just completed for the "Eclipse Barge Club," of Pittsburg, the race boat "W. H. Darling," named after her builder, at the request of the members of the club above referred to; she is a four oared boat, and well executed.

Since the completion of the "W. H. Darling," they have finished building an exceedingly handsome race boat called the "Stephen Roberts," for the "Hiawatha Boat Club," at Albany; this boat, without doubt, is about the finest boat of its class which has been executed by her builders. She was visited by many strangers as well as friends of the builders, and great satisfaction given by the members of the club; her reception at Albany was the occasion of a happy and joyful launching, affording much excitement and pleasure, on the 15th of June, 1858, an account of which appeared in one of the Albany papers.

The "Hornet," which we feel justified in mentioning among our race boats, is sufficient to answer for itself, as it will be remembered she was exhibited at the Crystal Palace in the year 1856, when a medal was awarded to her builders for producing the finest and best boat ever before the public in this country.

Another class of boats built by the Messrs. Darling are scull boats, of which we can only name the following:—

The "Galvanic Arrow," "Stephen Roberts," "Fancy," "Eliza Jane," "Olivia," "Conkshell," "Neptune's Car," and the "Frolic." The last mentioned was built by Mr. William H. Darling, while an apprentice, in the year 1838, and took the highest premium at the "Mechanic's Institute Fair," in 1839. The "Blackbird" is also a famous shell boat, which won the race at Boston, on the 19th of June, 1858. She made the quickest time on record for a scull boat, completing the two miles in 14:54.

The following Whitehall boats were built by the above mentioned firm:—The "E. Boyd," built in 1839, for Sydney Dolan. The "W. H. Darling," built for William Skidmore, and the "Bob Logic," for Isaac Johnson. The above mentioned boats are but a few only among the great number built by the Messrs.

W. H. & J. S. DARLING,
No. 368 South street, New York.

RACE, CLUB,

AND

SAIL BOATS.

--

GEO. C. NEWMAN,

PRACTICAL

Barge, Race, Club, and Sail Boat

BUILDER,

Foot of 119th street,

HARLEM, N. Y.,

Respectfully informs the public that he has constantly on hand a fine assortment of boats of every description, of his own construction. He is also prepared to receive orders, and guarantee dispatch and perfection. He has the honor to refer to the performances of a number of Yachts, Race, and Club Boats, for several years past, which have proved themselves to be some of the fastest on record, and have borne off the best prizes; among which may be mentioned: the Continental, O. U. A., Sea Witch, J. D. R. Putman, Lady Putman, Daniel D. Westervelt, Margaret Emma, Wm. H. Decker, Mike Walsh, Ripple, of New

Bedford; Undine, of Pittsburg; Omacatl, New York; Camille, and Star, of Philadelphia; Geo. C. Newman, of Williamsburg; and Phantom, of Chicago. Also, the Sail Boats, Northern Light, American Girl, Bee's Wing, Tornado, Storm Bird, Grape Shot, &c., &c.

Oars, Sculls, small spars, &c., constantly on hand. Boats of all kinds built to order at short notice.

The steamboats Sylvan Shore and Sylvan Grove, from Peck Slip, land ten times each day at the shop.

Frank Leslie's Illustrated Newspaper gave two large engravings of the eight oared barge ".Omacatl," built for the Omacatl Club of this City, and accompanied the illustration with the following remarks: —

The Omacatl Club, launched on the 3rd of May, 1856, is a beautiful eight oared craft, bearing the club's name, and the event, by the good taste and liberality of the club, was made an occasion of elegant festivity. The "Omacatl" is intended more especially for the amusement of the lady friends of the members of the club, and nothing could be too good or too luxurious when dedicated to their service. She is forty feet long, eight oared, and pronounced by good judges to be the most highly finished specimen of boat architecture ever seen in New York; in fact so fine are the equipments that it looks rather like an ornament for some ladies boudoir, than a craft designed to battle with the waves, and receive the rough usage of a club boat. Messrs. Newman & Randell, foot of 119th street, E. R., Harlem, are the builders.

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